Module 2 - Outsourcing: Make Versus Buy

Syllabus:

Module-2
Strategic Sourcing Outsourcing – Make Vs buy - Identifying core processes - Market Vs Hierarchy - Make Vs buy continuum -Sourcing strategy - Supplier Selection and Contract Negotiation. Creating a world class supply base- Supplier Development - World Wide Sourcing.

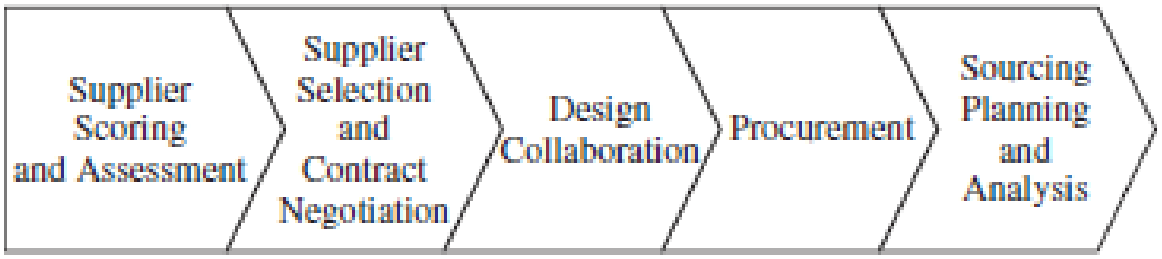
Sourcing in supply chain management:

Sourcing is the set of business processes required to purchase goods and services, Sourcing describes all those activities within the procurement process concerned with identifying and evaluating potential suppliers, engaging with selected suppliers and selecting the best value supplier(s).

The outcome of the sourcing process is usually a contract or arrangement that defines what is to be procured, on what terms and from which suppliers. Sourcing is the entire set of business processes required to purchase goods and services.

- Definition: It is a process of acquiring raw materials and other components, products or services of a company from its suppliers to execute its operations.

Sourcing processes include the selection of suppliers, design of supplier contracts, product design collaboration, procurement of material, and evaluation of supplier performance.



1. Supplier Scoring and assessment is the process used to rate supplier performance. Suppliers should be compared based on their impact on the supply chain surplus and total cost. Supplier scoring is based on characteristics like lead time, reliability, quality and design capability. A good supplier scoring and assessment process must identify and track performance along all dimensions and evaluate the impact on the total cost of using a supplier.
2. Supplier selection uses the output from supplier scoring and assessment to identify the appropriate supplier/s. A supply contract is then negotiated with the supplier.
3. Design collaboration allows the supplier and the manufacturer to work together when designing components for the final product. It also ensures that any design changes are communicated effectively to all parties involved with designing and manufacturing the product.
4. Procurement is the process whereby the supplier sends product in response to orders placed by the buyer. The goal of procurement is to enable orders to be placed and delivered on schedule at the lowest possible overall cost.
5. Sourcing planning and analysis is to analyze spending across various suppliers and component categories to identify opportunities for decreasing the total cost.

Strategic Sourcing Outsourcing:

Strategic sourcing outsourcing is where the focus is on identifying core competence whereby a firm can handle core activities internally and outsource all non-core activities to independent firms. When an activity is outsourced, the supply chain is coordinated using market mechanisms, whereas if the activities are managed internally, the chain is coordinated using the hierarchical processes within the firm. For example, Nike is a virtual corporation, the actual manufacturing is done by Nike sub-contractors working out of Taiwan, Hong Kong and South Korea, the actual manufacturing plants are located in Indonesia, China and Vietnam, the logistics, which involves transportation and storage, is handled by third-party companies. And the stores that sell the final products are franchisee outlets. Nike is a virtual corporation that has outsourced almost all activities. It has retained only two processes in-house—designing and brand management. This example emphasizes on core and non-core activities.

The decision of a firm to perform its activities internally or get those activities done from an independent firm is known as the make versus buy decision. This make versus buy issue is strategic in nature and involves the following key decisions: What activities should be carried out by the firm and what activities should be outsourced? How to select the entities/partners to carry out outsourced activities and what should be the nature of the relationship with those entities? Should the relationship be transactional in nature or should it be a long-term partnership?

Example: Bharti Airtel, India's number one private telecom service provider, announced its decision to outsource key network management activities (Network management to

Ericsson, Nokia and Siemens, IT management to IBM, Customer service call centres to Hinduja TMT, Mphasis, IBM Daksh and Teletech India) this sent shockwaves in the Indian industry. In addition to outsourcing network management services, it decided to outsource IT services and call centre operations also. This bold decision by Bharti generated a huge debate, not only among the telecom players but also among the Indian industries in general. One view is that by outsourcing these key activities, Bharti might lose its edge in the long run to end up as a hollow company, while the other view is that by outsourcing these activities to more competent external firms, Bharti can focus its energies on designing innovative offerings, customer relationships and brand building.

Make Versus Buy: The Strategic Approach

Supply chain deals with the transformation of goods from the raw material stage to the final stage, wherein the goods and services reach the end customer. The make versus buy decision evaluates all supply chain activities as primary activities and support activities. Primary activities consist of inbound logistics, operations, outbound logistics, sales and service. Secondary activities involve procurement, technology development, human resource management and firm infrastructure management. The make versus buy decisions look at each of these activities critically and ask the question: Should this activity be done internally or can it be outsourced to an external party? Once the decision to outsource has been taken, the firm has to choose among competing suppliers and also decide on the nature of the relationship it would like to establish with the supplier firm.

CASE STUDY TO UNDERSTAND OUTSOURCING

Bharti Airtel Limited, formerly known as Bharti Tele-Ventures, is one of India's leading private sector providers of telecommunications services with a market capitalization of Rs 936 billion, revenue of Rs 185 billion and customer base of 27 million. Bharti Airtel has been rated as one of the top 10 best-performing companies in the world in the BusinessWeek IT 100 list. For the last couple of years, its subscriber base has been growing steadily at 60 per cent per annum. In 2004, Bharti decided to outsource the following three areas of operations:

• Network management to Ericsson, Nokia and Siemens. These outsourcing partners manage the existing network and deploy and operate new base stations in the future. About 800 people from Bharti were transferred to the outsourcing partners. The value of the 3-year contract was $725 million. Bharti uses the pay-per-use model (dollar per Erlang; Erlang is a measure of traffic), and the outsourcing partner gets paid for the capacity used by Bharti and not on the capacity installed by the outsourcing partner. Bharti has a network management team to manage the interface with the outsourcing partner.

• IT management to IBM. IBM manages all IT services (billing, customer relations management), operates data centres, help desk for IT support and application development. About 200 people from Bharti were transferred to IBM. The $750 million contract was signed for a 10-year period. Bharti uses a revenue-sharing model with IBM. As revenues grow, Bharti shares a smaller percentage of revenue with IBM. Bharti has a seven-member architecture review board, which ensures that IBM decisions are aligned to the long-term goals of Bharti.

• Customer service call centres to Hinduja TMT, Mphasis, IBM Daksh and Teletech India. These outsourcing partners set up about 6,000 seats and have been managing customer service call centres for all customers except corporate clients and high-value clients. Bharti has about 1,500 seats in-house to maintain customer service for these high-end customers. This $350 million contract was signed for a 3-year period.

Bharti prepared a very comprehensive set of detailed service-level agreements (SLAs) with each outsourcing partner. These SLAs take care of almost all contingencies. Bonuses and penalties for the partners are linked to performance on crucial SLA measures. The partners committed 99.99 per cent availability of service. Bharti put up extensive mechanisms for managing its relationship with the outsourcing partners.

Identifying core processes:

All firms must identify selected processes as core processes and must focus on improving those processes, this can have a significant impact on the performance of a firm. The identification of core processes is a crucial decision. Identifying core processes for short-term benefits such as improving balance sheets and improving return on investments should be discouraged, the focus should be on long-term business sustainability. Short term goals should not endanger long term stability. The firms should aim at becoming the best in the chosen category (represented by core processes). Once the firm identifies the core processes they should invest in people, equipment's and R&D, such a focus will also help the firm in attracting the best talent from that field.

Thus, the first step for a firm is to develop the capability to identify core activities, once identified with core activities, it has to keep certain activities in-house, and for all outsourced critical activities,

it has to maintain some knowledge so that it can manage an effective relationship with its outsourcing partner.

The two ways through which one can identify a firm's core processes are the *business process route and the product architecture route.*

Example of Outsourcing non-core activities:

MICROSOFT'S ENTRY INTO VIDEO GAME BUSINESS[2]

When Microsoft decided to get into the business of video games in the mid-1990s, it decided that it would not carry out manufacturing and distribution activities in-house. Microsoft wanted to ensure that the Xbox was on the retailers' shelves in October 2001 and was sold for $400. Microsoft was very clear that it would focus only on the software part of the Xbox and leave the hardware design and manufacturing to Flextronics, a large electronics manufacturing service provider. While Sony keeps both design and manufacturing functions in-house, because it has competence in these areas, Microsoft decided to outsource these activities. Michael Marks, CEO and Chairman, Flextronics, commented: "Without Flextronics, there would be no Xbox—only the idea of it. Microsoft has a ton of money, but if they had to build factories, they wouldn't have done this project. If guys like us didn't exist, guys like Microsoft wouldn't do a hardware product. The risk would be too high."

The Business Process Route:

For any firm, three core and high-level business processes include customer relationship, product innovation and supply chain management. Customer relationship focuses on acquiring new customers and building relationships with existing customers. Product innovation focuses on developing new products and services, while supply chain management focuses on fulfilment of customer orders. Firms like HP and high-end pharmaceutical firms focus on product innovations. Firms like Nike and Benetton focus on brand building and customer relationships. Firms like Wal-Mart and Dell Computers focus on supply chain management capabilities. In the case of Microsoft (refer to the case study above), it decided that customer relationship management and software design are its core processes, while design and manufacturing is not core to its business. Bharti decided that customer relationship was core and network management was not.

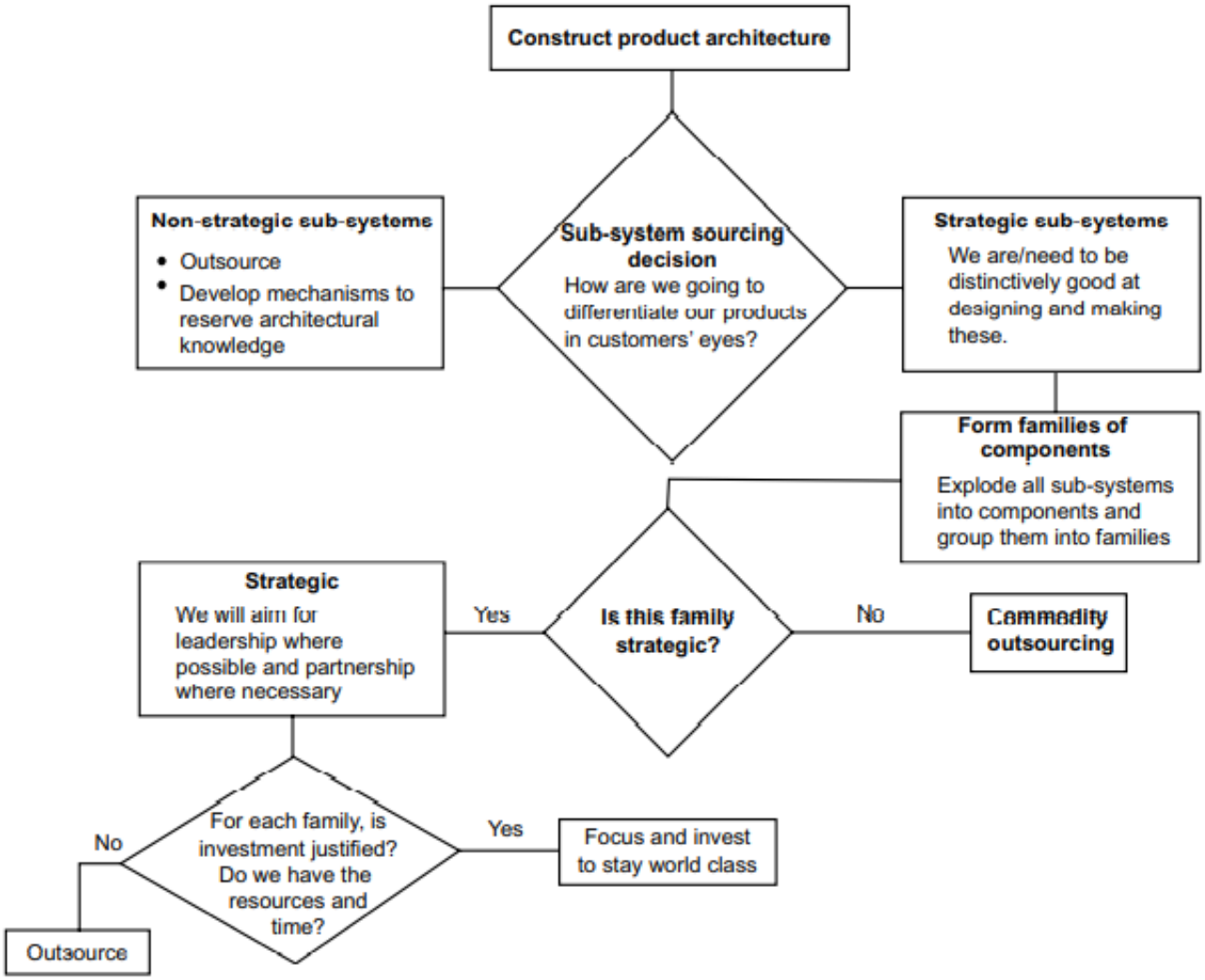
Core processes retained within the company must be strategic from the business point of view. Firms must realize that value within the chain gets distributed to the chain partners on the basis of the unique capabilities that they bring to the table. A firm has to ensure that it has a relatively higher bargaining power within the chain. A firm has to make sure that in-house business processes give it enough strategic power in the chain and do not allow other chain partners to dictate the terms of value exchange in the chain.

The Product Architecture Route:

In the product architecture approach, the focus is on sub-systems and components. A product like a car can be divided into sub-systems such as engine, chassis and transmission. The engine sub-system can be divided into components such as power cylinder, fuel system and engine electronics. In a product architecture route, first the sub-systems are classified as strategic and non-strategic. ***A sub-system is strategic if it involves technologies that change rapidly, if it requires specialized skills and technologies and if it can significantly impact the performance of the product on attributes that are considered important by the customer***. Firms have to keep theses strategic sub-systems internal, a firm can ensure that it can offer differentiated products and can avoid being a commodity. Further, within a sub-system, the same kind of analysis has to be done for all major components. All those components where the firm is technologically ahead of potential suppliers or can hope to achieve a leadership position with some investments are kept internal to the firm. In case the suppliers have a huge technological lead, which will be impossible to bridge in the foreseeable future, or if the time and investments required for catching up may not be worth the effort, then the component should be outsourced and the supplier should be treated as a strategic partner (refer to the flow diagram below).

Examples; Tata Motors realized that in diesel engine technology it was far behind its suppliers and will never be in a position to catch up with them. So it decided to buy diesel engines from Fiat and treat Fiat as a strategic partner. Cummins discovered that pistons were part of a strategic sub-system but that its suppliers were far ahead in the relevant technologies and therefore decided to buy pistons rather than make them internally. Honda might treat engine technology a strategic sub-system, while Nissan might treat transmission as a strategic sub-system.

Even when one outsources a strategic sub-system or component, one should retain the knowledge of its architecture in-house. A firm must control its design and manufacturing by remaining the expert in architectural knowledge.



Market versus Hierarchy:

The make versus buy decision that the firm has to make is also known as ***the market versus hierarchy decision***. All firms have to coordinate and manage the supply chain so as to provide goods and services at the lowest cost for a given level of service required by the customer. The firms may choose to produce the goods and services in-house or buy it from a supplier, if the firm decides to make it in-house then they will not get the cost advantage (also known as "economies of scale") and they have to use "internal hierarchy" system to control the production of goods and services. In the case where the firm decides to produce in-house, the firm may have greater control over the production activities but the internal team may not be motivated enough to innovate, improve service level, and reduce the cost of production, these costs that are incurred in controlling and co-ordinating internal teams is called "Agency Cost".

When a firm uses a supplier or the market to procure the necessary inputs, it may be able to take advantage of economies of scale (explained in the next section) and also choose the supplier that supplies goods and services at lower prices. In this case, the supplier has enough motivation to innovate and the firm, as a buyer, has the flexibility of changing the supplier, which is not an option

available to the firm that chooses to make inputs internally. However, there are costs incurred in the control and coordination of the external supplier and are termed as “transaction costs”.

Costs related to economies of scale are tangible or can be measures but the most of the agency and transaction costs are intangible or cannot be measured.

The important factors that govern “Make vs Buy” decisions are as follows:

1. **Economies of Scale:** Economies of scale are cost advantages reaped by companies when production becomes efficient. Companies can achieve economies of scale by increasing production and lowering costs. This happens because costs are spread over a larger number of goods. Firms that specialize in production of input can usually achieve higher economies of scale if it is vertically integrated (A vertically integrated firm produces only for its internal needs). If the firm buys it from a supplier, the supplier enjoys huge economies of scale (the supplier caters to many customers and hence can reduce the cost of production and selling price becomes lower). There are four major sources of economies of scale:
    a. **Higher volume allows a firm to spread its fixed cost over a larger volume of operations**
    b. **Higher volume allows a firm to choose more efficient technologies**
    c. **Pooling of buffer capacities and inventories**
    d. **Learning curve effect**

Higher volume allows a firm to spread its fixed cost over a larger volume of operations: Any manufacturing or logistics process will involve investments in fixed costs. A firm with higher volume is able to spread its fixed costs over a higher output and thus has lower cost of operations. Similarly when a firm sets up its manufacturing unit, the set-up cost is the same, irrespective of the volume of production. So a firm with bigger batch sizes will have lower costs of operation.

Higher volume allows a firm to choose more efficient technologies: Higher volume allows a firm to invest in technologies that are capital intensive but result in lower fixed and variable costs per unit of output. Example: a transport firm that can transport 40 tons per trip in a Volvo truck will have lower costs per ton of material compared to a transport firm that requires four trucks of 10-ton capacity each to transport the same volume of goods.

Pooling of buffer capacities and inventories: If firms keep their activities in-house, they have to keep buffer capacities and inventories to take care of the uncertainties in demand. A supplier, on the other hand, is able to pool uncertainties over a larger number of customers and as a result needs much lower levels of buffer capacity and safety inventory. Example, a logistics firm that transports Maruti cars from Gurgaon to Bangalore carries Kurlon’s mattresses to their Delhi warehouse on the return trip. Consequently, it is able to offer lower transport costs to Maruti as well as to Kurlon. Similarly, a contract manufacturer can improve capacity utilization if it can work with two different companies having seasonal demands in different seasons: one with seasonal demand in the winter and the other with seasonal demand in the summer.

Learning curve effect: The management and the workers are able to improve their performance based on experience gained through the cumulative production of a firm. In several industries, it is found that with doubling of cumulative production the average cost declines by 10 to 20 per cent.

Firms should avail the advantages of third-party companies that provide manufacturing and logistics services. A supplier who is providing services to a larger set of customers will always have lower costs. Firms are turning to contract manufacturers whenever they think that the manufacturing process does not provide sources of competitive advantage.

2. **Agency Cost:** In a firm, there is greater control over coordination, but there may not be enough motivation for the internal supplier to work on innovations to reduce costs and improve service over a period of time. The cost involved in control and coordination of internal supply is termed ***agency cost***. Example: Bharti Airtel used to manage customer billing operations through its internal IT department. The important question here is, "How does one ensure that the interest of the IT department and that of the marketing departments are aligned, and how does one make sure that the IT department is putting its best effort and is not slackening?" This issue is known as the ***agency problem***. The IT department is known as the ***agent*** and the marketing department as the ***principal***. A firm with its own fleet of trucks faces a similar problem of motivating the transport department, where the internal transport department is the agent and the marketing department is the principal.

   There is significant time and effort involved in the control and coordination of internal activities. If one decides to manufacture the necessary inputs within the firm, then the firm has to worry about agency issues. It is quite common that managers and workers of internal supply units sometimes knowingly do not act in the best interests of the firms, thus the top management incurs agency costs.

3. **Transaction Cost:** The costs incurred in the control and coordination of the external supplier are termed as transaction costs. . The transaction costs comprise the following:
   - **a.** Search and information costs. Costs involved in locating and evaluating the right supplier
   - **b.** Bargaining and contracting costs. A firm has to first negotiate the terms of exchange and finally prepare the contract so that it is assured that the supplier will provide the required goods and services as per the agreed terms and conditions.
   - **c.** Policing and enforcement costs. A firm has to constantly monitor the supplier so as to ensure that the supplier sticks to the terms and conditions of the contract. Firms might also have to legally enforce the contract if the supplier does not follow the contract. This is covered under SLA's (service level agreement)
   - **d.** Cost incurred because of loss of control

4. **Incomplete Contracts:** A complete contract can **c**overs each party's (supplier & manufacturer) responsibilities and rights for each and every contingency that could arise during the transactions. But, in reality it is impossible to write a complete contract. The reasons why contracts are not complete are as follows"
   - **a.** Managers, when dealing with complex situations, are unlikely to seek and process all the information available in the contract.
   - **b.** Difficulties in specifying or measuring performance, example: When hiring a management graduate, companies accord a higher importance to the reputation of the college because it is difficult to judge a candidate, straight out of college, for a managerial job. Firms assume that reputed management colleges have process controls in place to ensure quality in the graduate.

c. Certain information about future changes, either in technology or the supply market, may result in lower costs, but the supplier may not provide the relevant information and may take advantage of it while fixing either the price or other conditions in the contract.
d. Some emerging economies like India, where legal infrastructure is weak, it takes an enormous amount of time to get a legal remedy. In some countries like China, the contract may not be enforceable. So, in effect, we have to work with incomplete contracts.

The inability to write a complete contract results in a significant increase in the cost of transaction.

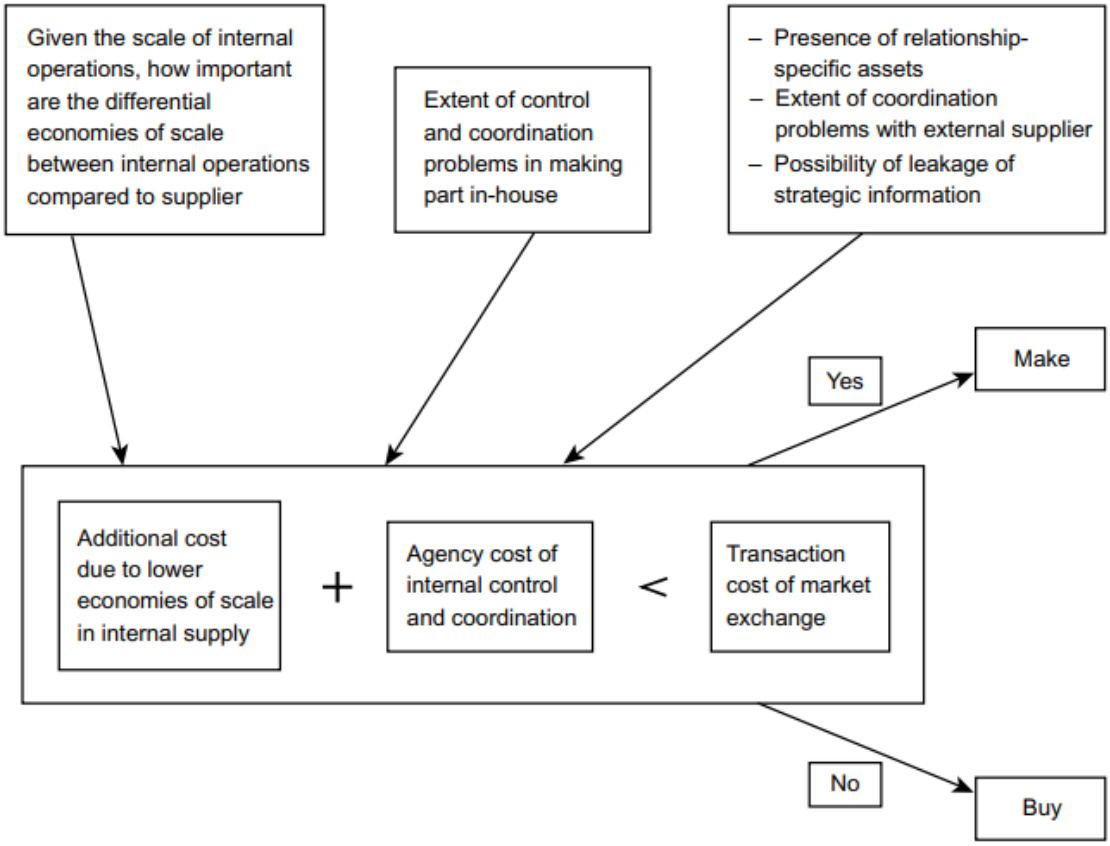
5. **Relationship-specific Assets:** A relationship-specific asset is an investment made to support a given transaction. In several situations, a firm will be able to improve the efficiency of transactions and reduce costs in the process if the supplier can invest in specialized assets, these specialized assets could involve either physical assets or human capital. Example: FMCG (Fast Moving Consumer Goods) players typically ask the packaging material suppliers to locate their facilities close to the buyer's plant. But the supplier might not be keen on investing in assets as the supplier is worried that after investing in assets the customer might not place the order or may change the supplier. This point have to be taken care of while writing contracts.

6. **Poor Coordination:** In several supply chain situations, coordinating decisions between both parties is essential for overall performance. Because of differences in objectives and priorities, coordination on all occasions is not guaranteed between buyers and suppliers.

7. **Leakage of Strategic Information:** If a firm is buying from a supplier that is also supplying similar inputs to competitors, a lot of strategic and sensitive information is likely to get leaked to the competitors. It may relate to product design or customer information or future plans. This point has to be critical while choosing between Make vs Buy.

Framework of Market versus Hierarchy

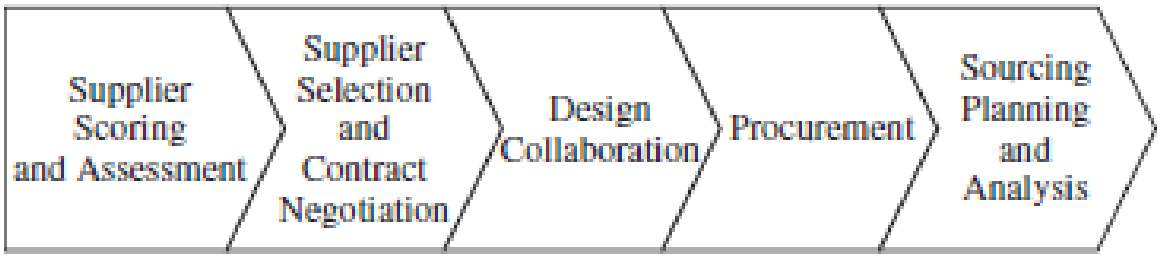
To resolve the make versus buy issue, a firm has to look at the benefits as well as the costs involved, Costs related to economies of scale, agency costs and transactions costs have to be considered. If additional costs due to poor economies of scale plus agency costs of internal control and coordination are less than transaction costs of market exchange, the firm should settle for the make option, else the firm should opt for Buy option



Sourcing Strategy:

Sourcing describes all those activities within the procurement process concerned with identifying and evaluating potential suppliers, engaging with selected suppliers and selecting the best value supplier(s). It is a process of acquiring raw materials and other components, products or services of a company from its suppliers to execute its operations. Sourcing is the entire set of business processes required to purchase goods and services.

Sourcing processes include the selection of suppliers, design of supplier contracts, product design collaboration, procurement of material, and evaluation of supplier performance.



Steps involved is Sourcing Strategy:

Strategic sourcing is a procurement process that connects ***Data collection and spend analysis, Supplier discovery and RFP, Negotiations and contracting, Implementation and optimization***

1. **Data collection and spend analysis**: Spend analysis concentrates supplier data into one source, letting organizations know exactly what's being spent where and presenting the opportunity to streamline vendors.
2. **Supplier discovery and RFP**: Sourcing becomes a strategic advantage when organizations can access supplier data through a digital business network, allowing them to request RFPs (Request for Proposals) and have suppliers compete for their business.
3. **Negotiations and contracting**: Automated tools can speed workflows, simplify the digital signature process, and create an electronic repository of contracts where organizations can set renewal alerts.
4. **Implementation and optimization**: When sourcing is automated and digitized, organizations can move faster, build in feedback loops for continual optimization, and constantly evaluate suppliers to make sure they're getting the best sourcing agreements possible.

Need of strategic sourcing:

1. Increased level of cost savings
2. Better Alignment of Sourcing and Business Objectives
3. Optimization of Ideal Suppliers
4. Long-term Relationship Building with Suppliers

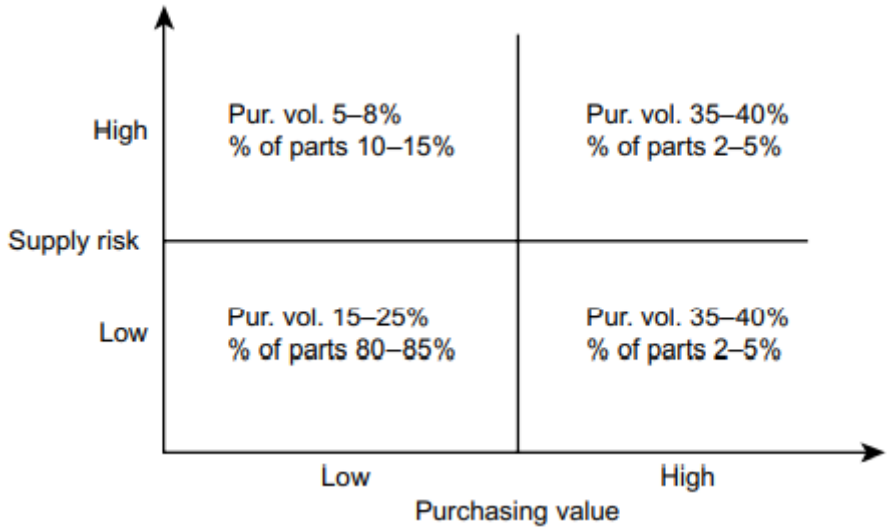
Sourcing Strategy: Portfolio Approach (Kraljic Matrix)

The popular portfolio approach developed by Kraljic classifies items based on the importance of the item in terms of value of purchase (high versus low) and associated supply risk in the supply market.

Supply risk captures two dimensions: number of suppliers in the market and the demand–supply gap in the supply market. If an item has very few suppliers who have monopoly in the market and supply is less than the demand, the buyer faces a significant supply risk. In supply markets where there are large numbers of players and there is surplus capacity in the market, the items bought will be classified as low-supply-risk category items.

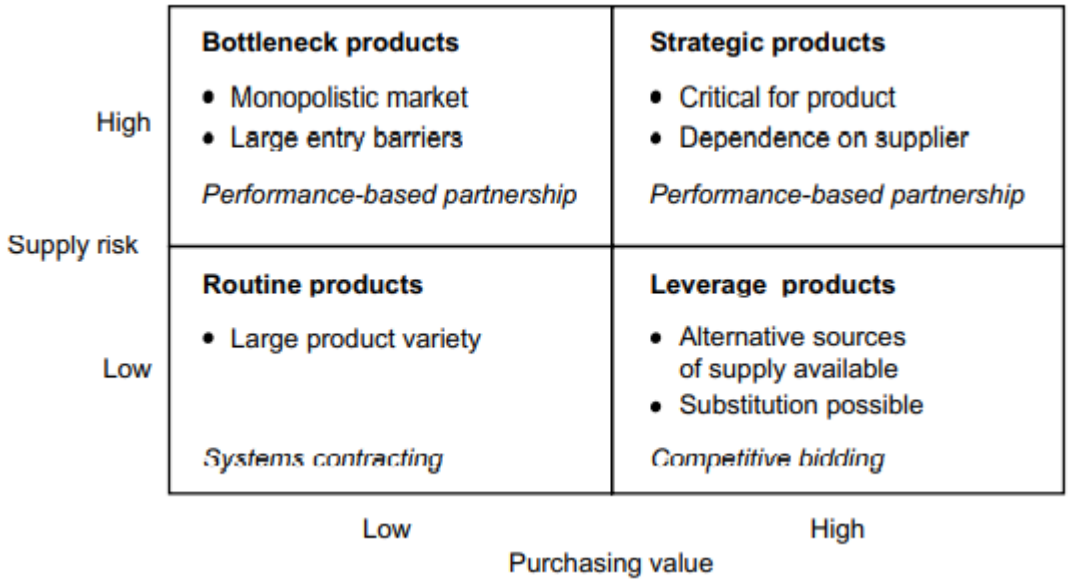
Purchase portfolio approach explains that 80 per cent of the items constitute 20 per cent of the value. Rather than buying individual components, firms should buy systems and modules, but, managers typically end up spending equal amounts of time and effort on all items and all suppliers, manager may not be focusing on items where opportunities may be high or supply risks are significant.

As seen in the figure below, low-value, low-risk quadrant items account for 80–85 per cent of the items and 15–25 per cent of the purchase value. low-value, low-risk quadrant will account for the largest number of purchase orders and, therefore, will take up the bulk of the purchasing manager's time. The purchase manager needs a different sourcing strategy for each quadrant (This is discussed in detail in the Karljic Matrix.)



The Karljic Matrix for Sourcing Strategy:

To overcome the problems faced by sourcing managers as explained above, Karljic developed a matrix as seen below:



Routine products: This quadrant represents significant opportunity. The focus is on reducing the number of parts and the number of suppliers. The aim is to reduce administrative and logistics complexity. The time saved here is used to focus on strategic suppliers and bottleneck suppliers. The focus is on moving to system buying rather than component buying. A large number of items and suppliers come in this quarter, which represents a non-critical, low-valued supply. Unfortunately, managers end up spending much energy in this quarter. Ideally, the purchasing department should not waste its energy on small items. Rather, it should aggregate components into systems and start sourcing the systems.

Leverage products: This quadrant consists of high-value, standard products. These items provide an opportunity for leveraging buying power in low-supply-risk situations. In these supply markets, there are a large number of suppliers and switching costs are low. So firms should be aggressive in their attempts to encourage competitive bidding in order to leverage their position. Here the firm can reduce the number of suppliers and focus on operational-level management so that apart from purchasing costs inventory and administrative efforts can also be reduced.

Strategic products: This quadrant represents high-value products with high supply risks. This quadrant usually accounts for less than 5 per cent of the items and for almost 40 per cent of purchase value. Items in this quadrant are treated as strategic items, and a firm must work towards establishing collaborative, long-term relationships with suppliers in this quadrant. Firms must create opportunities for mutual cost reduction by working together on all aspects, including product design. Because fewer parts and suppliers are involved, firms can invest in building collaborative relationships. The top management of firms should get actively involved in devising a strategy for this category of items.

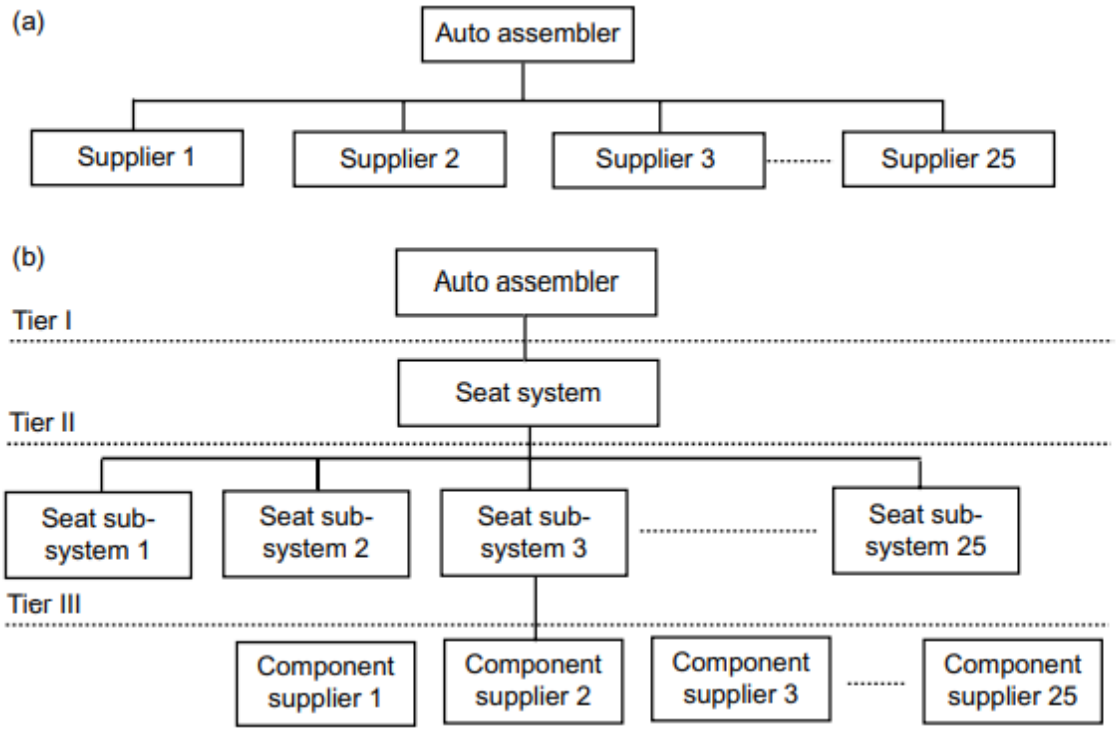
Bottleneck products: These items represent relatively low value, but a firm is vulnerable on this front because of the supply risk inherent in this market. Since a firm is likely to be buying relatively smaller value, it is also unlikely to have much clout with suppliers. Here, the focus is on securing

supply, and a firm should actively keep looking at alternative sources of supply. If possible, the firm should also look at substitutes that are from low-risk supply markets. Firms should try and develop a better understanding of supplier priorities and their planning systems so that it can align its buying plan with the suppliers' operating plans.

Sourcing Strategy: Reconfiguration of the Supply Base

Most of the suppliers have very little motivation to innovate and reduce cost, and firms do not want to depend on single supplier or single sourcing is risky so firms have to work on reconfiguring their supply base so as to reduce the number of suppliers. Reconfiguration involves the following two ideas:

- Move to system buying
- Reduce the number of suppliers per item/system



Purchase portfolio analysis reveals that 80 per cent of the items constitute 20 per cent of the value. Rather than buying individual components, firms should buy systems and modules. Let us take company (a) and Company (b) (as seen in figure above), company (a) buy product parts from 25-odd suppliers, while company (b) buy's the complete product from one supplier. Here the supplier (b) does not manufacture all the 25 components of the product but it just means that the supplier is a first-tier supplier who in turn buys sub-systems from second-tier companies, who in turn depend on third-tier companies. Firms, by following the 3 tier structure have minimized their coordination costs by moving to system/module buying, which requires a pyramid-shaped supply structure. By working only with tier I suppliers, a firm can not only reduce coordination costs but also work on various initiatives to improve material and information flow across the chain.

Sourcing Strategy: Impact of the Internet

Firms prefer to evaluate a large number of potential suppliers this will help the firm in lowering the price at which it will buy the item. There are costs involved in locating and evaluating the right supplier, firms traditionally work with a limited number of suppliers located in their geographical proximity. Internet technology has changed the nature and extent of costs involved in the search and evaluation process. Because of advances in IT in general and the Internet in particular, costs related to computer-aided information search and coordination have declined, averaging 25 per cent per year, hence Internet lowers search and evaluation costs. One example is ***electronic reverse auction,*** this process became a popular technology, this technology allowed the buyer to organize auctions where potential suppliers all over the world could bid via the Internet and the firm could select the most suitable supplier. Another example is ***Electronic Data Integration (EDI)***, EDI helps in better coordination with strategic partners and suppliers.

E-SOURCING AT MARICO

Marico is a market leader in the hair care business. For its Parachute brand, it procures copra (raw material) worth Rs 3 billion in money value and equivalent to 600 million coconuts in quantity terms annually. Copra supply has traditionally been in the unorganized market and most of the producers are illiterate. Buying copra on this scale required lot of time and effort on the part of Marico. In 2004, Marico launched an e-sourcing initiative (implemented in stages), which transformed the buying process gradually from manual to an automated electronic process. Potential vendors send their quote through SMS and get an electronic confirmation within half an hour. The payment is also made electronically. Apart from making the process more efficient, e-sourcing has given Marico much greater control over the buying process.

Supplier/Vendor Selection:

Supplier selection is the process by which firms identify, evaluate, and contract with suppliers. The supplier selection process deploys an enormous amount of a firm's financial resources and plays crucial role for the success of any organization. The main objective of supplier selection process is to reduce purchase risk, maximize overall value to the purchaser, and develop closeness and long-term relationships between buyers and suppliers.

The supplier selection is one of the most important decision-making issues in supply chain management field. The selecting process is critical for enhancing the company’s competitiveness, and requires the assessment of different alternative suppliers based on different criteria. One of the most crucial components in SCM is supplier selection.

A suitable supplier selection would reduce purchasing costs, improve profits, decrease product lead time, grow the customer satisfaction, and strengthen the competitiveness that is why it has become an essential focus for every purchasing organization.

5 steps to successful supplier/vendor selection:

Step 1 – Supplier Selection Scorecard:

The first step in the supplier selection process is to create a supplier selection scorecard.
The supplier selection scorecard contains all the important elements the firm require in a supplier. It has long been stated, “That which does not get measured, does not get done”.
The scorecard should be quantifiable and include:

- Supplier characteristics***
- The important strategic alignment factors you value
- Applicable business policies
- Any constraints – management directives, government regulations, contracts already in place, and other commitments

All of the above may be important but some are more important than others. For example, quality may be most important. Surprising to some, cost is often a low priority. If a supplier offers poor quality, long lead time, late deliveries, etc. Does it really matter how low the price is? It simply won’t work.

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Supplier Characteristics

Cost	Reputation
Quality	Certifications
Delivery	Collaboration
Location	Customer Base
Capacity	Financial Health
Flexibility	Social Responsibility
Lead Time	Product Development

Step 2 – Identify Suitable Suppliers

Once the firm have the selection criteria in place, they must create the pool from which they will select a supplier. During this part of the process the firm will want to consider:

- Current suppliers – Starting with suppliers that have experience and established relationships
- Past suppliers – Depending upon the reasons why they are 'past' and not 'current'
- Competitors – the firm may be in a position to buy from a competitor if it is ethical and low-risk
- Industry groups – many of which are non-profit and maintain data bases of member companies
- Recommendations and prior business relationships – perhaps created while working at other companies
- Internet – which offers myriad opportunities to find, research, and contact potential suppliers

Step 3 – Scorecard Ranking

Next, gather information from the identified suitable suppliers – perhaps in the form of a Request for Quote (RFQ) or Request for Proposal (RFP). When the quotations are received from the potential suppliers, a preliminary technical and commercial evaluation should be done by the purchasing department in order to weight the technical, logistics, quality, financial, and legal aspects. In addition, the offered price can be compared between the suppliers but the more important is to look at the total cost of ownership instead of at the prices itself, then tabulate the information that is collected and use the scorecard to rank the potential suppliers. Depending upon the complexity and/or criticality of the product or service:

- Select the highest ranking supplier – Recognize that while the firm are not required to pick the top scorer, moving too far down the list is a red flag, indicating the process was flawed.
- Choose more than one for further qualification – May include interviews, site visits, etc.

If all that work did not identify a clear winner, the firm may need to review their criteria and/or expand their search.

Step 4 – Negotiate

After the firm have narrowed the list to a manageable number of best options, possibly just one, the negotiations should begin.
Depending on the critical goods or service, the firm may negotiate with just the top supplier on their scorecard, even if others remain on the list of potentials.
These others, of course, are not told they are not #1 until after you have completed negotiations and agreements are completed.
Based upon the complexity of the situation, lawyers may be involved.

Step 5 – Create Contract

Once an agreement is reached, a contract is created and signed.
For many transactions, the purchase order is the contract. For complex situations, you may have a contract and then create a separate purchase order.
Creating the purchase order will include activating the procurement system. This should be a standard operating procedure and include getting the accounts payable process ready to process the supplier invoice.

Carter's 10 Cs of Supplier Evaluation:
The 10 Cs are criteria for assessing the suitability of a potential supplier.

1. Competency: First, look at how competent the supplier is. Make a thorough assessment of their capabilities, and measure them against your needs. Then look at what other customers think. How happy are they with the supplier? Have they encountered any problems? And find out why former customers changed supplier.

2. Capacity: The supplier needs to have enough capacity to handle your company's requirements. So, ask how quickly they will be able to respond to your needs, and to market and supply fluctuations. Look at the supplier's resources, too. Do they have the means to meet your orders, taking into account their commitments to other clients? (These resources could include staff, equipment, storage, and available materials.)

3. Commitment: Your supplier needs to provide evidence that they are committed to high quality standards. Where appropriate, look for quality initiatives within the organization, such as ISO 9001 or Six Sigma. The supplier must also show they will be committed to you, as a customer, throughout the time that you expect to work together. (This is particularly important if you're planning a long-term relationship with them.). Look for evidence of their ongoing commitment to fulfilling your requirements, whatever the needs of their other customers.

4. Control: Ask how much control this supplier has over their policies, processes, procedures, and supply chain. How will they ensure that they deliver consistently and reliably, especially if they rely on scarce resources, and if these resources are controlled by another organization?

5. Cash: Your supplier should be in good financial health. Cash-positive firms are in a much better position to weather economic ups and downs. So, does this supplier have plenty of cash at hand, or are they overextended financially? And what information can the supplier offer to demonstrate their ongoing financial strength?

6. Cost: Look at the cost of the product or service that this supplier provides. How does it compare with the other options that you're considering?. Most people consider cost to be a key factor when choosing a supplier. However, cost is in the middle of the 10 Cs list for a reason. Other factors, such as a commitment to quality and financial health, can potentially

affect your business much more than cost alone, particularly if you plan to rely on the supplier long-term.

7. Consistency: the supplier should have processes or procedures in place to ensure consistency, a demonstration of the product should be given of the test product.

8. Culture: The best business relationships are based on closely matching workplace values . This is why looking at the supplier's business culture is important. For example, what if your organization's most important value is quality, and your main supplier cares more about meeting deadlines? This mismatch could mean that they are willing to cut corners in a way that could be unacceptable to you.

9. Clean: This refers to the supplier's commitment to sustainability, and their adherence to environmental laws and best practices. What are they doing to reduce their environmental footprint? Ask to see evidence of any green accolades or credentials they have earned. Also, does this supplier treat their people – and the people around them – well? Do they have a reputation for Corporate Social Responsibility, and for doing business ethically?

10. Communication: Find out how the supplier plans to keep in touch with you. Will their proposed communication approaches align with your preferred methods? And who will be your contact at this firm? It's also important to find out how the supplier will handle communications in the event of a crisis. How quickly will they notify you if there's a supply disruption? How will that communication take place? And will you be able to reach senior people, if you need to?

Contract Negotiation Strategies to Select the Right Supplier/Vendor:

Contract negotiation is the process of coming to an agreement on a set of legally binding terms between two companies. When two companies negotiate, both parties seek to obtain favourable terms and minimize financial, legal and operational risk. Vendor & Supplier Negotiations are based upon fairness, in that the buyer gets and supplier provides the right quality at the right price. Contract Negotiations is to ensure that our agreements set our companies up for long-term success.

Selecting the right suppliers makes a major difference to the cost and quality of the firm’s products and services, especially when the company is expanding. Getting the best value for money involves achieving the right balance between cost and factors such as quality, reliability and service.

The firm needs to be clear about what they are looking for and what their objectives are in any negotiation. The best deals leave both sides happy as part of building a successful working relationship.

What does a successful contract look like?

A contract can be regarded as a success when these conditions are met:

- both organisations understand their contract rights and obligations and adhere to them
- the expected business benefits, both financial and operational, are being realised
- internal stakeholders are satisfied with the deal
- a performance monitoring process exists, and it's efficient and fit for purpose
- the supplier is responsive and committed to resolving issues

Principles to be followed when negotiating a contract with suppliers:

1. Have Choices before negotiating with suppliers: The firm needs to have at least 2 or 3 suppliers that are competing for the supplier role. If the firm has only 1 supplier quote, or if the firm are stuck with a sole or single source supplier, then it is difficult to negotiate.

2. Understand the Price Quoted by the Supplier: The firm need to have a good understanding of the price they are trying to negotiate. By this it means that the firm knows that the supplier can still make a reasonable profit and still provide the goods/services to them without decline in quality, speed and time. To do this the firm would need a good understanding of price and cost analysis.

3. Understand your positioning with the supplier: If the firm is an important client to the supplier and if the supplier stands to lose a substantial amount of revenue by not getting the firms business (eg 10% or more), this will help tremendously in negotiations. No supplier will want to lose a long term client, even if that means sacrificing few percentage points. So the positioning should be clear.
4. The contract should explain clearly all essential prerequisites, terms and conditions.
5. The contract should clearly define the Goods & services to be provided.
6. The key performance indicators (KPIs) which will be used to monitor supplier performance
7. Reporting requirements - content, frequency and review meetings
8. Communication channels, order & delivery practices, and any system integrations that may need to be in place
9. Key contacts at both parties for dispute resolution, disaster management and continuity
10. Training and skills transfer requirements
11. Compensation should be clearly stated which includes total cost, payment schedule, and financing terms.
12. Acknowledgement is made of effective dates, completion/termination dates, and renewal dates.
13. Identify and address potential risks and liabilities.
14. Define and set reasonable expectations for this relationship, both currently and into the future
15. The contract should assess potential liabilities and risks
16. The contract should include Confidentiality, non-compete, dispute resolution & changes in requirements.

Creating a world class supplier base:

The rise of the globalized economy has rewritten the rules for supply chain management, It's opened up vast new markets, brought millions of new customers into play, and offered new options for designing, building and delivering products. In a world where supply chains can span continents, multiple channels, and hundreds of partners and service providers, the risk of unexpected business disruptions is growing. Firms need to identify and mitigate this risk by carefully planning, executing, and monitoring the physical and financial movement of goods throughout your entire supply chain. To create a world class supply base there needs to be supply chains that are faster, more agile, and even more tightly integrated with suppliers and customers.

Technology has become a critical success factor in today's data-driven supply chains, firms need to use technology to redesign their supply chain systems to gain efficiencies and cost savings – and help them stand out from the competition. Technology helps the firm in the following:

■ Improvement in lead times and first-time order fulfilment

■ On-target inventory and reduced stock-outs

■ More efficient shipment and delivery

■ Greater precision in planning and execution

To create a world class supply base the firm should do the following:

- Profitably balance supply and demand, optimize operations to minimize costs, and build resiliency and maximum performance into the supply chain to respond rapidly to changing business conditions
- Accurate demand management allows the firm to boost profitability by helping the firm detect local demand volatility and make rapid adjustments to forecasts and production plans.
- Firms should design and implement innovative logistics and transportation management solutions. Firms should optimize transportation planning, execution, freight payment, and business process automation on a single application across all modes of transportation, from full truckload to complex multi-leg air, ocean, and rail shipments.
- Use information as a weapon, Information is being used as a tool to integrate and optimize critical supply chain processes—from design, planning, and procurement to manufacturing and fulfilment, information-driven supply chains enable businesses to succeed by predicting market requirements and risks, adapting and innovating quickly in response to economic shifts, and forecasting demand with precision and speed.

Supplier Development:

Supplier development can be defined as any activity that a buying firm undertakes to improve a supplier's performance and capabilities to meet the buying firm's supply needs.

As manufacturing firms outsource more materials, subassemblies, and even complete products and services to focus on their own core competencies, they increasingly expect their suppliers to deliver innovative and quality products on time and at a competitive cost. When a supplier is incapable of meeting these needs, a buyer has three alternatives:

1. Bring the outsourced item in-house and produce it internally,
2. Re-source with a more capable supplier,
3. Help improve the existing supplier's capabilities

Most companies today prefer to continue outsourcing in an effort to maintain flexibility in meeting changing market demands. Thus, even critical items may be outsourced. This shift towards greater levels of outsourcing reinforces the need for strong supplier development capabilities. Supplier development increasingly is becoming the best choice for companies. Some scholars have concluded that the option of switching to another supplier should be sought only when it is "absolutely" necessary.

Firms use a variety of activities to improve supplier performance including: assessing suppliers' operations, providing incentives to improve performance, instigating competition among suppliers, and working directly with suppliers, either through training or other activities.

Supplier development may go beyond the first tier of suppliers to the second or third tier.

Supplier development should be a proactive step rather than being reactive. Instead of working with suppliers for quick fixes to problems, supplier development should focus on helping suppliers retain the learning that occurs in the development process. Retained learning is critical for suppliers so that they may continuously improve their own systems. Further, a supplier who has retained its ability to improve then can work with its suppliers to help them improve. The net effect is a more capable, more competitive supply chain

Supplier development requires that both firms commit financial, capital, and personnel resources to the work; share timely and sensitive information; and create an effective means of measuring performance and progress

When suppliers become proficient at new technologies, improve their quality or delivery performance, or improve their own supply management systems, they create cost savings that benefit both themselves and the end customer. The improvements also create an example for other members in the supply chain that can stimulate improvement

Best Practices in Supplier Development:

- Create dedicated supply development teams (with no responsibilities or jobs other than supplier development)
- Teach a supplier how to develop itself after initial guidance from the supplier development team
- Focus on underlying causes of long cycle times
- Focus on wasteful activities in all supplier efforts
- Involve suppliers in new product and process development at the buying firm
- Provide training programs and training time to suppliers
- Provide education programs offline that go beyond training
- Provide improvement focused seminars for suppliers
- Provide tooling and technical assistance to suppliers
- Provide supplier support centres
- Loan executives, such as process engineers and quality managers
- Drive fear out that a supplier's workforce may have towards supplier development programs
- Set "stretch goals" to encourage radical change as well as continuous improvement
- Improve accounting systems to enable measurement of improvements
- Share the savings from the development improvements
- Encourage suppliers to contribute to improving processes at the buyer's facilities
- Provide a feedback loop for suppliers to help encourage supplier development efforts to improve the supplier's supply management system

Barriers to Supplier Development:

There are many barriers to effective supplier development:[24] [25]

- Poor communication and feedback
- Complacency
- Misguided improvement objectives
- Credibility of customers
- Misconceptions regarding purchasing power
- Lack of clarity and commitment
- Lack of a unified approach
- Misaligned sourcing and performance metrics
- Concealment of problems
- Initiative fatigue
- Resource limitations
- "Blame the supplier" culture
- Lack of trust
- Confidentiality issues
- Legal issues
- Imbalance of power in the relationship

World Wide Sourcing or Global Sourcing:

Global Sourcing is a procurement strategy used by businesses wherein goods and services are sourced from the global market to obtain the highest levels of efficiency possible. The goal of Global Sourcing is to lower production costs while maintaining the exacting quality standards required for products and services.

How can Global Sourcing help the firm:

- ❑Acquire high-quality resources
- ❑Global Sourcing helps you in finding sourcing opportunities in next-door countries
- ❑Lower shipping costs
- ❑Make use of spot market opportunities.
- ❑The important thing about global sourcing is that it becomes a very powerful tool to leverage talent, improve productivity and reduce work cycles.

5 Stages in Global Sourcing Process

1) Stage1: Investigation and tendering.
2) Stage2: Evaluation.
3) Stage3: Supplier selection and development.
4) Stage4: Implementation.
5) Stage5: Performance measurement & continuous improvement.

Pros and Cons of Global Sourcing

Advantages :

i. Low cost manufacturing.

ii. Tapping skills and resources that are not available in the home nation.

iii. Seeking the benefit of alternate suppliers.

iv. Utilizing an efficient supply chain management systems.

v. Learning global business skills.

vi. Meeting competition prudently and efficiently.

Pros and Cons of Global Sourcing

Disadvantages :

i. No exposure of international culture, traditions and beliefs.

ii. Hidden costs related to different time zones and languages.

iii. Financial and political risks associated with emerging economies.

iv. Risk of losing intellectual properties, patents and copyrights.

v. Long lead times.

vi. Labor problems and labor related issues

vii. Unnecessary shutdowns an supply interruptions.

viii. Difficulty in supervision.

ix. Difficulty of monitoring goods and services quality.

Costs Associated With Global Sourcing

1. **Country's Origin:**

i. Technological advancement

ii. R&D difficulties

iii. Distribution and logistics network

iv. Country's specific richness

v. Saving associated with buying from a particular country

2. **Import Duty**

3. **Foreign Currency Risk**

Costs Associated With Global Sourcing

4. **Trade Blocks**

5. **Merchandise Carrying Cost**

6. **Opportunity Cost of Capital**

7. **Logistics Expense**

Barriers in Global Sourcing

1. Language Barrier
2. Cultural difference
3. Climate/time difference
4. Distance Issue