AMLAN DAS

ASST. PROFESSOR

SOURCING MANAGEMENT (SM)

Module – I	**Introduction to Global Sourcing:** Objectives, Process and Trends in Global Sourcing – Supply Management – Strategic Sourcing Plan, Strategy and Model– Environmental and Opportunity Analysis – Global Operational Sourcing Strategy, Negotiation – Nature, Strategy and Planning– Performance Measurement and Evaluation– Risk Management in Sourcing (Concepts) – Nature and Principles of Risk Management, Risk management process, Risk management tool and technique, Managing risk in international business.
Module – II	**Supplier Research and Market Analysis:** Vendor Rating – Objectives, Self certify vendor management, Criteria and Methods of Vendor rating – Supplier Evaluation and Selection (Concepts), Solicitation of Bids and Proposals – Planning and Methods, Contract negotiation, Vendor performance monitoring and controlling.
Module – III	**Analytical Tools in Sourcing, Pricing Analyses:** Analytical Tools in Sourcing (Foreign Exchange Currency Management, Learning Curve, Quantity Discount Models), Integrative Pacific Systems Case (Supplier Scorecard, Sourcing Risk, Supplier Financial Analysis) – Electronic Sourcing – Sustainability and Sourcing, Green Sourcing.

CASE STUDIES AND PROBABLE QUESTIONS HAVE BEEN ATTACHED AT THE LAST.

MODULE-1 INTRO TO GLOBAL SOURCING	
INTRODUCTION	
OBJECTIVE ,PROCESS AND TREND	
SUPPLY MANAGEMENT AND STRATEGIC SOURCING PLANNING	
ENVIRONMENT AND OPPORTUNITY ANALYSIS ,GLOBAL OPERATIONAL SOURCING STRATEGY	
NEGOTIATION –PLANNING AND STRATEGY	
PERFORMANCE MEASUREMENT AND EVALUATION	
RISK MANAGEMENT IN SOURCING	
NATURE AND PRINCIPLES OF RISKS,PROCESS	
RISK TECHNIQUES , INTERNATIONAL RISK MANAGEMENT	

MODULE-2 SUPPLIER RESEARCH AND MARKET ANALYSIS	
VENDOR RATING OBJECTIVES	
SELF CERTIFYING VENDOR MANAGEMENT	
CRITERIA AND VENDOR RATING	
SUPPLIER EVALUATION AND SELECTION CONCEPTS	
SOLICITATION OF BIDS AND PROPOSALS PLANNING AND METHODS	
CONTRACT NEGOTIATION	
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MODULE-3 ANALYTICAL TOOL IN SOURCING ,PRICING ANALYSIS	
ANALYTICALS TOOL IN SOURCING(INTRODUCTION)	
FOREIGN EXCHAGE CURRENCY MANAGEMENT	
LERANING CURVE	
QUANTITY DISCOUNT MODEL	
INTEGRATIVE PACIFIC SYSTEM CASE-SUPPLY SCORE CARD	
SOURCING RISKS	
SUPPLIER FINANCE ANALYSIS	

SUSTAINABLE SOURCING.	
ELECTRONIC/E-SOURCING	
GREEN SOURCING	
CASE STUDY	
PROBABLE QUESTIONS (MODULE WISE)	

Module – I

Introduction to Global Sourcing

Sourcing:

1) Sourcing means the selection by a firm of its sources of supply raw materials and components in the case of a manufacturer, final products in the case of a retailer.

2) Strategically, a firm may choose to buy in a particular input (or product) from an outside supplier (outsourcing), or produce it for itself as part of a vertically integrated operation (e.g. vertical integration, make-or-buy decision).

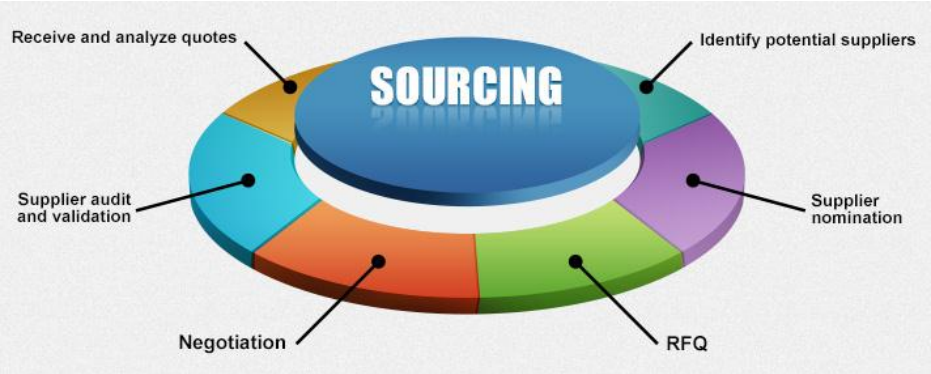


Figure: Sourcing

3) Sourcing is defined as a technical activity with the purpose of **identifying existing suitable products and services on the market and qualified suppliers available to provide those products and services.**

4) Sourcing also aims at **collecting and analyzing information about capabilities within the market** to satisfy the organization's requirements, such as obtaining updated cost information, determining the appropriate technology and alternative products, as well as identifying appropriate supplier qualification criteria.

5) Sourcing process, leading to **identification and invitation of relevant suppliers, ensures maximized competition, by allowing the most relevant and suitable companies to compete.** Sourcing also leads to a better understanding of the market. This knowledge helps to:

- **Assist in a make or buy or lease decision**
- **Determine when to buy**
- **Establish realistic delivery schedules**
- **Review sole/single source justifications**
- **Identify price and non-price evaluation factors**
- **Identify special terms and conditions for the solicitation and resulting contract that are customary in special markets**
- **Establish realistic budgets, pricing arrangements and economic ordering quantities.**

Introduction to Global Sourcing – Objectives, Process

What is Global Sourcing?

It is the **process of sourcing goods and services from the international market across geopolitical boundaries.** It aims to exploit global efficiencies such as lower cost skilled labor, cheaper raw materials and other economic factors like tax breaks and low trade tariffs.

Examples are call centers in the Philippines, clothing and shoes manufactured in China and Thailand.

Figure: Global Sourcing

Global sourcing has become an economic imperative for many organizations. Increased competition, globalization, and the desire to enter developing markets overseas to drive growth have driven a greatly increased level of international sourcing.

A comprehensive global sourcing strategy is required.

While cost reduction remains one of the leading factors in driving organizations to turn toward global sourcing, lower cost alone are unlikely to provide a competitive advantage if our competitors are also sourcing internationally.

Global Sourcing – Objectives:

Global sourcing is one component of a company's overall sourcing management strategies (Figure below). It should systematically determine whether a product or service should be

- **Made in-house,**
- **Outsourced, and sourced locally,**
- **Regionally or globally**

To support the organizations continued success**.**

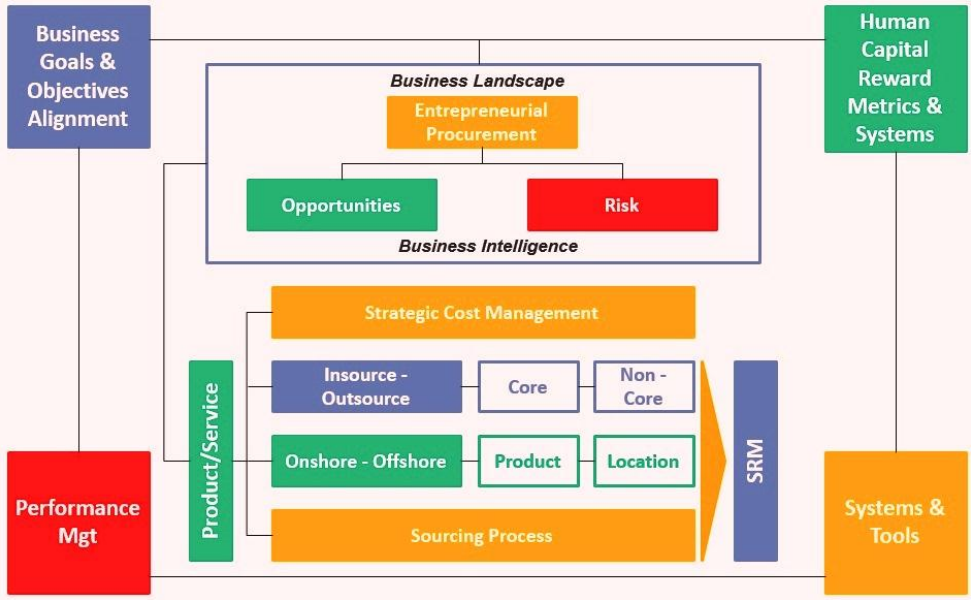


Figure: CPP Sourcing Strategy Framework

Business goals (linking with strategic sourcing) that lead to sustainable Competitive Advantage (CA) includes:

- **Becoming the lowest cost producer**
- **Achieving world class quality**
- **Maintaining constant innovation**
- **Minimizing time to market**

When **sourcing goals (objectives)** link directly to the business, global sourcing can make a significant contribution to the sustainable success of the business.

To do this, **procurement needs an evaluation framework (Figure below)** to help organization to understand organizations business strategy, value chain and sources of competitive advantages in order to select **appropriate products, locations and suppliers for global sourcing.**

Once this is understood, procurement can start to develop sourcing strategies that help strengthen existing sources of competitive advantages and secure new ones.

Figure: Global Sourcing Evaluation Framework

Objectives for a global sourcing plan might include

- A specific amount of cost saving
- An improvement in customer support **through reduced lead times from suppliers and better on-time delivery performance**
- Development of **new supplier alliances and partnerships**
- **Reduction of inventory levels**
- Development of **new demand management planning tools and models**

Global Sourcing Process:

Figure: Sourcing Process

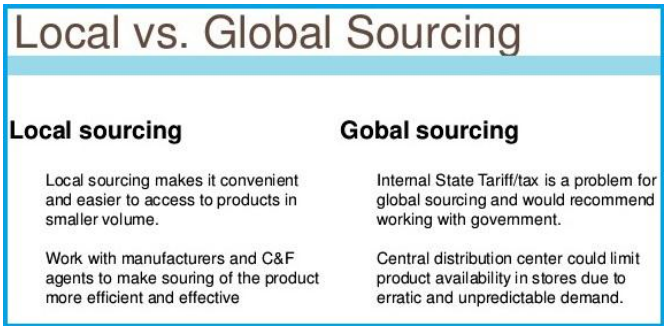
The strategic sourcing process provides the discipline by which to manage supplier selection and to maximize value contribution.

The key to successful strategic sourcing is a robust and sustainable process supported by strong governance and conducted via suitably skilled people. See examples of good working practice in Table below.

Example of Good practice in Global Sourcing		
1	**Governance**	Ensure **governance is in place to support the process and manage conflict.**
2	**Process**	A robust sourcing process with involvement of **internal customers and stakeholder is essential to ensure buy outcomes.**
3	**Specification**	**Clear, well written specifications supported by samples etc**. are an essential requirement. No sourcing initiative should even be contemplated unless this requirement has been fulfilled.
4	**Service Expectation**	Corporate fully understands their **expectation from supplier and concern for how performance will be assessed.**
5	**Research**	Research of supply markets
6	**External Factors**	Keep aware of the external factors that may influence our source country **(political, economic, environmental, social, technological etc.).**
7	**References**	The safest method of sourcing is to only use suppliers that have an existing customer base in the west. This often means that the supplier has been developed by a western company to the point where they are more conditioned to meeting western service expectations. **Here references are western company supplier.**
8	**Contracts**	**Significance of contracts in global connection among corporate**
9	**Supplier Relationship Management**	**Diligence in contract and ongoing communication with performance management of supplier** will create a robust supplier relationship with corporate.

Table . Perspectives on Global Outsourcing.

	Firm Level	Context Level	Transaction Level
Past	Resource-based view	Social networks	
Present	Costly contracting	Industrial organization	Transaction-cost economics
	Microeconomics Core competences	Institutional voids	Agency
Future	Real options		
	Relations and learning		



Key Evaluation Dimensions of Global Sourcing:

The key success factors of global sourcing evaluation revolve around three dimensions:

1) **Product**
2) **Location**
3) **Supplier**

These dimensions must be systematically evaluated as part of the strategic sourcing process:

Product: It is important to determine **suitable products for global sourcing**.

The key is to target products that provide **high benefit and low risk** and that fit well with overall company objectives.

Such products have **high labor content and low shipping costs.** A thorough **product positioning review** and **business risk assessment** should be weighed against the advantages taking into account factors such as **product life-cycle, lead time, labor content, IP(Industrial Protection) and transportation etc.**

For example :(types of products we face in supply)

- **Products that are large, bulky or perishable are more difficult to transport.**
- **Products with large demand variation require holding more inventories, increasing costs and risk of obsolescence.**
- **Products with long lead time may also increase inventory requirements.**

For this extra measures have to be taken.

Location: Companies engaged in global sourcing should develop a geographic strategy to determine which countries they will buy from and how volumes will be allocated.

By determining the comparative advantage of countries, procurement can determine whether it pays to source a product locally or internationally. In addition to low labour cost, sources of comparative advantage come from factors such as:

- **Available talent pool**
- **Cost of raw materials, capital equipment, and taxation levels, etc**
- **Logistics infrastructure such as roads and ports**
- **Political stability**

Supplier: Due to the additional complexities (many corporate to one supplier) of global sourcing it is advisable to allow for **longer screening and trial periods with new suppliers to evaluate capabilities. Capabilities can be sub categorized**, including:

- **References in market**
- **Quality assurance**
- **Facilities & Security**
- **Disaster recovery (financial, operational)**
- **Process Capabilities**

Part of finding the right supplier is ensuring that **the organization has more than the right equipment and quality.**

It also makes sense to know **whether the supplier can be a long-term partner with our business.**

To make such a determination it is vital to get a complete understanding of the **underlying financial resources, management team, extended trading relationships and general management practices.**

Typical Problems in Global Sourcing:

i. **Poor processes for sourcing** in global are hurdles and contain greater risk than local sourcing.

ii. **Communication Hurdles:**
   - Time difference
   - Language difficulties, face to face and via teleconference
   - Difficulty in understanding documentation provide in English

iii. **Total landed cost:**
   - Additional stockholding cost (more quantity procurement than required amount)
   - Additional audit costs, taxation

iv. **Performance failures:** failure to adequately define and manage quality
v. **Lack of ongoing communication leads to service decline**
vi. **Problem in Ethical consideration**: human rights issues & Environmental issues.

Trends in Global Sourcing:

Global-sourcing strategy generally refers to management of

(1) **Logistics to identify which production units** will serve which particular markets and how components will be supplied for production

(2) The interfaces **among R&D, manufacturing and marketing on a global basis.**

The primary objective of global-sourcing strategy is for the firm to **exploit both its suppliers' competitive advantages and the comparative location advantages of various countries in global competition due to sourcing.**

From a contractual point of view, the global sourcing of intermediate products such as components and services by firms takes place in two ways:

(1) From the parents or their foreign subsidiaries on an ''intra-firm'' basis (i.e., in sourcing)
(2) From independent suppliers on a ''contractual'' basis (i.e., outsourcing).

Similarly, from a location point of view, multinational firms can procure goods and services either
(1) Domestically (i.e., on shoring)
(2) From abroad (i.e., off shoring).

In the past 15–20 years, we have observed three waves of global sourcing.

The first one, starting in the mid-1980s, was primarily focused on the global sourcing of manufacturing activities.
Large manufacturing firms **increasingly set up their operations globally and began to use suppliers from many countries to exploit best-in-world sources.**
As consequence, supply chains became **more global and complex**, with manufacturing firms sourcing from suppliers in many countries for **raw materials, intermediate and final products.**

A second wave started in the early 1990s

The rise of commercial applications for a wide range of firm activities, epitomized in **enterprise resource planning systems.**

A third wave, characterized as the off shoring movement, began in recent years. The rise of business-process outsourcing that extends beyond IT services to a range of other services relating **to accounting, human-resources management, finance, sales and after-sales assistance such as call centers.**

India is still a primary source country and has now produced a range of strong local business-process providers such as Infosys and Wipro but competition from elsewhere is also on the rise.

It is this third wave of business-process outsourcing that is now generating so much publicity. The recent waves of global sourcing are summarized in Table below.

Table. Recent Waves in Global Sourcing

	First Wave (Since 1980s)	Second Wave (Since Early 1990s)	Third Wave (Since Early 2000s)
Type of Activities Suppliers	• Manufacturing China, Central and Eastern Europe, • Mexico and others	• Information Technology India, Ireland and others	• Business Process India, Pakistan, South • Africa and others
Type of Firms	• Manufacturing	• Manufacturing, banks and others	• Financial services and • Services
Primary Motives	• Reduction in labor • Costs	• Skilled programers • Cost reduction	• Reduction in labor cost • Service provision

In sourcing:

- In sourcing is a business practice in which work that would have been contracted out is performed **in house.**
- **An example is the use of in-house engineers to write technical manuals for equipment they have designed, rather than sending the work to an outside technical writing firm.**
- Other challenges of in sourcing include the possible **purchase of additional hardware and/or software that is scalable and efficient enough to deliver an adequate return on investment (ROI).**
- In sourcing can be viewed as outsourcing as seen from the opposite side.
- For example, a company based in Japan might open a plant in the United States for the purpose of employing American workers to manufacture Japanese products. From the Japanese perspective this is outsourcing, but from the American perspective it is in sourcing. **Nissan, a Japanese automobile manufacturer, has in fact done this.**

Outsourcing:

- Outsourcing was first recognized as a business strategy in 1989 and became an integral part of business economics throughout the 1990s.

- Outsourcing is the business practice of hiring a party outside a company to perform services and create goods that traditionally were performed in-house by the company's own employees and staff.

- Outsourcing is a practice usually undertaken by companies as a cost-cutting measure.

Understanding Outsourcing:

Outsourcing can help businesses reduce labor costs significantly.

When a company uses outsourcing, it enlists the help of outside organizations not affiliated with the company to complete certain tasks.

The outside organizations typically set up different compensation structures with their employees than the outsourcing company, enabling them to complete the work for less money. **This ultimately enables the company that chose to outsource to lower its labor costs.**

In addition to cost savings, companies can employ an outsourcing strategy to better focus on the **core aspects of the business.**

Outsourcing non-core activities **can improve efficiency and productivity** because another entity performs these smaller tasks better than the firm itself.

This strategy may also lead to faster process by increasing competitiveness within an industry and the **cutting of overall operational costs.**

Examples of Outsourcing:

Outsourcing's biggest advantages are time and cost savings.

- A manufacturer of personal computers might buy internal components for its machines from other companies to save on production costs.

- A law firm might store and back up its **files using a cloud-computing service provider**, thus giving it access to **digital technology** without investing large amounts of money to actually own the technology.

- A small company may decide to outsource **bookkeeping duties to an accounting firm, as doing so it may be cheaper than retaining an in-house accountant.**

- Other companies **find outsourcing the functions of human resource departments, such as payroll and health insurance, as beneficial.**

- Outsourcing is an **effective strategy to reduce expenses, and can even provide a business with a competitive advantage over rivals.**

Expected Benefits from Global Outsourcing:

Operational Benefits:

- Reduce operating costs
- Improved service and product quality
- Faster delivery
- Financial restructuring (e.g., reducing assets, moving from fixed to variable costing)

Transformational Benefits:

- **Flexibility in technologies and business processes** help to be in strategic direction.
- **Business transition** to facilitate and support major organizational change
- **Business innovation** to improve processes, skills and technology, while mediating financial risk to achieve competitive advantage

Strategic Benefits:

- Focus on core competencies
- Strategic agility
- **Strategic sourcing** (e.g. off shoring or using offshore competition to get better prices and service, best of breed sourcing)
- Enhance strategic capabilities by partnering with a complementary supplier
- **Rapid penetration of new markets**
- Operate in **new geographies**
- Direct profit generation through **joint venturing with vendor partner**

On shoring:

On shoring may also refer to the practice of **outsourcing to domestic contract manufacturers rather than overseas.**

As the cost benefits of off shoring fade away, more American-based manufacturers are seeing the benefits of domestic production. **Domestic manufacturing has several financial and logistical advantages**. On shoring has seen **resurgence in popularity** in the manufacturing world for the following reasons:

Negligible cost differences: **Shipping costs** involved in **off shoring and near shoring** processes continue to rise. **Labor costs** in developing Asian and Central American markets are also rising.
This means that the significant savings that incentivized off shoring in the late 20th century have been largely reduced or eliminated.

International Politics: Many companies are creating a blend of **local on shoring and near shoring production techniques** to appeal to domestic markets. This localized control also allows companies to better comply with **regulatory demands and quality control requirements.**

Non-cost factors*:* Companies must consider non cost factors such as conforming to material standards, variations in product quality, and potential losses and gain of intellectual property rights

Supply Chain Management*:* On shoring operations and using domestic partners often allows companies to operate in the same time zone as the companies they hire. It also reduces language barriers, cultural barriers, and transportation complexities. It is very much noticed in supply chain.

On shoring is an increasingly popular outsourcing method for several industries and project types, such as:

- Automotive production
- Parts manufacturing, including zinc die-cast mold tooling and thermoplastic injection molding
- Complex manufacturing processes

Table. Differences between on shoring, Reshoring, Near shoring &Off shoring

On shoring	Reshoring	Near shoring	Off shoring
Same definition as reshoring	The practice of transferring business operations that was moved overseas back to the country from which it was originally relocated.	Outsourcing to companies within the organization's national borders	Outsourcing to companies based in other countries

Off shoring:

Off shoring, the **practice of outsourcing operations overseas**, usually **by companies from industrialized countries to less-developed countries**, with the intention of reducing the cost of doing business.

The specific reasons for locating operations outside a corporation's home country are lower labor costs, more lenient environmental regulations, less stringent labor regulations, favorable tax conditions, and raw materials.

Evolution of off shoring -

The off shoring of jobs and infrastructure became a significant factor in global economic development in the mid-20th century. Companies initially focused their outsourcing efforts on low-skilled or unskilled manufacturing jobs and simple assembly tasks.

By the early 21st century, however, the work being exported increasingly included skilled jobs. As communications technologies advanced and educational opportunities increased, many developing countries were able to provide sophisticated labor forces.

Corporations around the world began tapping these new workers to staff customer-call centres and to

fill jobs in **financial management and (IT)**.

In the early 21st century, factors spurred the growth of off shoring in the financial services industry and brought new jobs in **banking, insurance, and securities trading to a global workforce newly qualified to handle the tasks.**

Table. Differences between off shoring & Outsourcing

	Off shoring	Outsourcing
Definition	• **Off shoring** means getting work done in a different country.	• **Outsourcing** refers to contracting work out to an external organization
Risks and criticism	• Off shoring is often criticized for **transferring jobs to other countries.** • Other risks include geopolitical risk, language differences and poor communication etc.	• **Misaligned interests of clients and vendor** • Lack of in-house knowledge of critical business operations etc.
Benefits	• Benefits of off shoring are usually **lower costs, better availability of skilled people, and getting work done faster through a global talent pool.**	• Usually companies outsource to take **advantage of specialized skills, cost efficiencies and labor flexibility.**

Global Sourcing Advantages:

- Increase size of potential supply base
- Lower production cost, especially for labor-intensive production and services
- Increased technical expertise, especially for high tech products from specialized locations
- **More flexibility to switch between supply sources**, whether internal or external
- **Achieve scale economics** through use of one global supply source
- Source of **intermediate products closer to source of raw materials** (due to connectivity)
- Raw materials only available from foreign sources
- Focus on core competencies

Global Sourcing Disadvantages:

- Have to deal with foreign institution such as legal differences
- Have to deal with foreign cultures which could affect communication
- Have to deal with foreign languages which could affects communication
- Need to pay **import duties** where applicable
- Increase **transportation costs and supply chain uncertainty**
- **Patent infractions (infringement) may possible**
- **Facing Quality challenges**

Supply Management:

Definition:

1) **A supply chain is the alignment of firms that bring products or services to market.**

2) Supply Management can be defined as the management of flow of products and services, which begins from the origin of products and ends at the product's consumption. It also comprises **movement and storage of raw materials that are involved in work in progress, inventory and fully furnished goods.**

3) The main objective of supply management is to **monitor and relate production, distribution, and shipment of products and services.** This can be done by companies with a very good and tight hold over **internal inventories**, production, distribution, **internal productions and sales.**

4) Supply management is the coordination of **production, inventory, location, and transportation** among the participants in a supply chain to achieve the best mix of responsiveness and efficiency for the market being served.

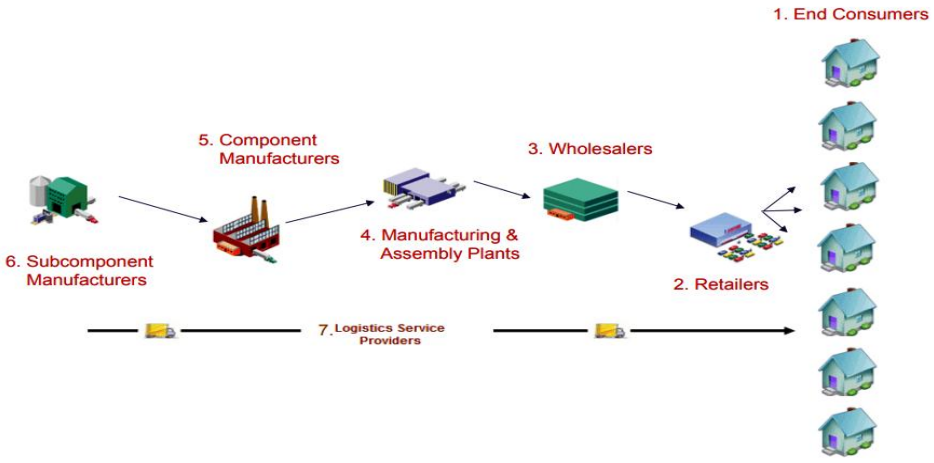
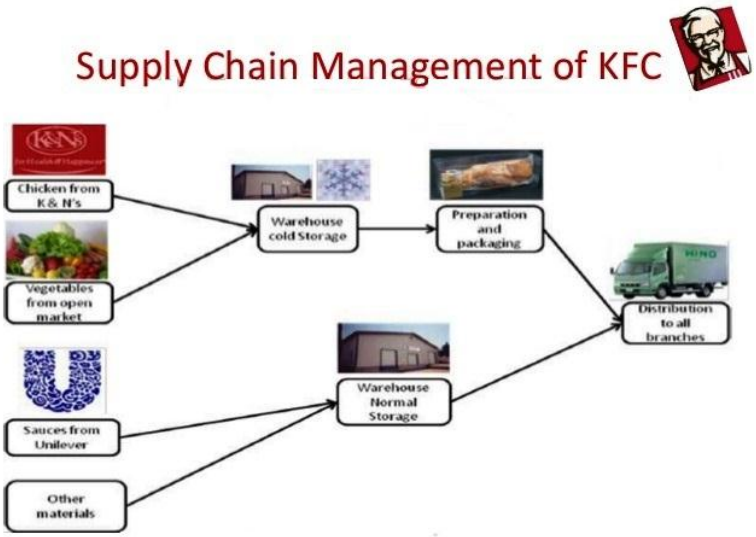


Figure: Supply Management

Goals of Supply Management:

1) Supply partners work collaboratively at different levels to **maximize resource productivity, construct standardized processes, remove duplicate efforts and minimize inventory levels.**
2) Minimization of supply chain expenses is very essential, especially when there are **economic uncertainties in companies.**
3) Cost efficient and cheap products are necessary, but supply chain managers need to concentrate on **value creation** for their customers.
4) Exceeding the customers' expectations on a regular basis is the best way to satisfy them.
5) **Increased expectations of clients for higher product variety, customized goods, off-season availability of inventory and rapid fulfillment.**
6) Supply management aims at contributing to the financial success of an enterprise.



Supply Management – Process:

Supply management is a process used by companies to ensure that their supply is efficient and cost-effective. A supply chain is the collection of steps that a company takes to transform raw materials into a final product. The five basic components of supply chain management are discussed below:

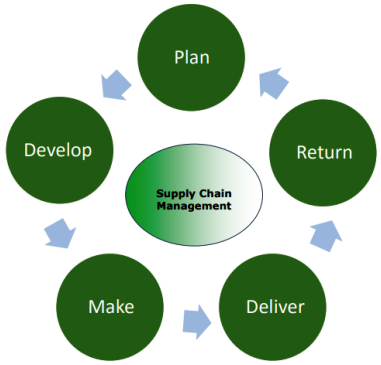


Figure: Supply Management Process

Plan*:* The initial stage of the supply process is the planning stage. We need to develop a plan or strategy in order to address how the products and services will satisfy the demands and necessities of the customers. In this stage, the planning should mainly focus on **designing a strategy** that **yields maximum profit.**

Develop (Source): In this stage, we mainly concentrate on building a strong relationship with suppliers of the raw materials required for production. This involves not only identifying dependable suppliers but also determining **different planning methods for shipping, delivery, and payment of the product.**

So in this stage, the **supply managers need to construct a set of pricing, delivery and payment processes with suppliers and also create the metrics for controlling and improving the relationships.**

Make: The third step in the supply chain management process is the manufacturing or making of products that were demanded by the customer. In this stage, **the products are designed, produced, tested, packaged, and synchronized for delivery.** This stage is considered as **the most metric-intensive unit of the supply chain,** where firms can **gauge the quality levels, production output and worker productivity.**

Deliver: The fourth stage is the delivery stage. Here **the products are delivered to the customer at the destined location by the supplier.** This stage is basically the logistics phase, where customer orders are accepted and delivery of the goods is planned.

Return: The last and final stage of supply chain management is referred as the return. **In the stage, defective or damaged goods are returned to the supplier by the customer**. Here, the companies need to deal with customer queries and respond to their complaints etc.

Supply Chain Management – Process Flow:

Supply chain management can be defined as a systematic flow of materials, goods, and related information among suppliers, companies, retailers, and consumers. There are three different types of flow in supply chain management:

1) **Material flow**
2) **Information/Data flow**
3) **Money flow**

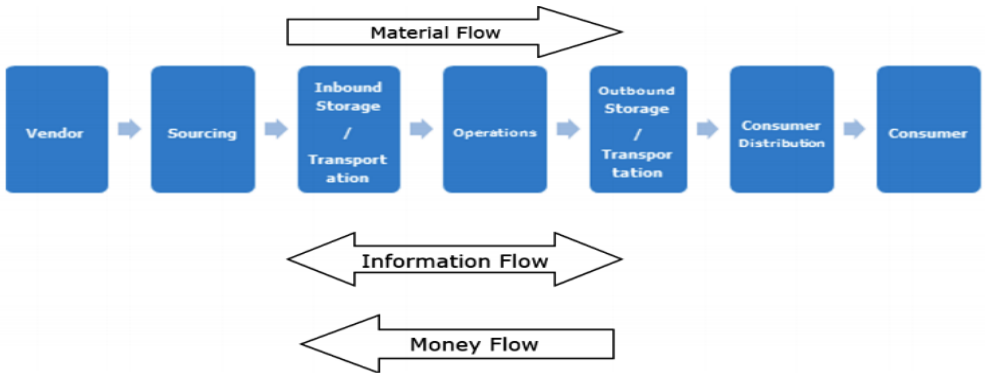


Figure: Supply Chain Management – Process Flow

Supply chain as a Network of Entities:

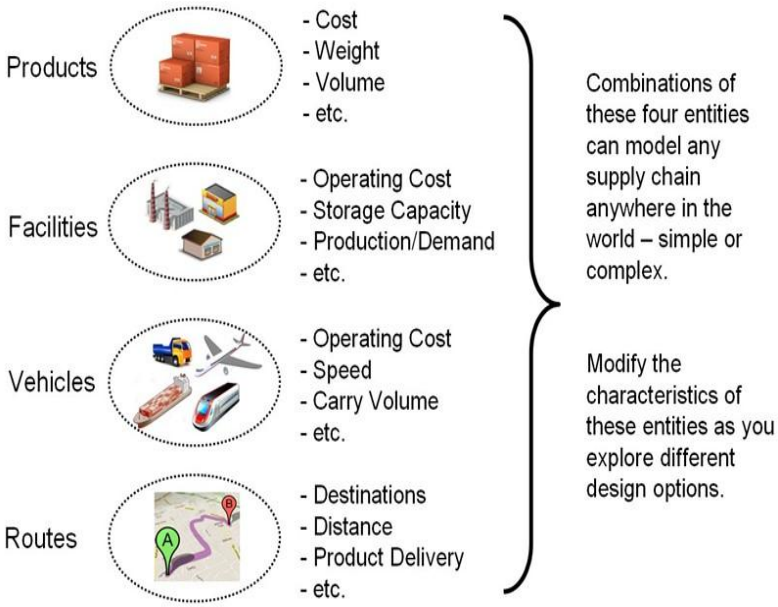
A supply chain is a network between a company and its suppliers to produce and distribute a specific product to the final buyer.

This network includes different **activities, people, entities, information, and resources.**

The supply chain also represents the steps it takes to get the product or service from their original state to the customer. The entities in the supply chain include **PRODUCTS; FACILITIES; VEHICLES; ROUTES.**

These entities relate to each other and their interactions are what drive supply operations and produce the simulation results.

- **PRODUCTS:** things in demand at facilities
- **FACILITIES:** places where products are made, stored or consumed
- **VEHICLES:** mechanisms to move products between facilities to meet demand
- **ROUTES:** paths taken by vehicles to move products between facilities.



Supply Management–Advantages:

1) Develops better customer relationship and service.
2) Creates better **delivery mechanisms for products and services in demand with minimum delay**.
3) **Improvises productivity and business functions**.
4) **Minimizes warehouse and transportation costs.**
5) **Minimizes direct and indirect costs.**
6) Assists in achieving shipping of **right products to the right place at the right time.(logistics)**
7) Enhances inventory management, supporting the **successful execution of just-in time stock models.**
8) Assists companies in adapting to the challenges of globalization, economic upheaval, expanding consumer expectations.
9) Assists companies in **minimizing waste, driving out costs, and achieving efficiencies** throughout the supply chain process.

Job responsibilities for a Supply Manager include:

- Overseeing and managing overall supply chain and logistics operations, to **maximize efficiency and minimize cost.**

- Collaborating with multiple-functional managers to plan and execute the development of a Distribution center with operational process.
- Managing and monitoring vendors' qualifications and performances to ensure they meet the company's requirements.

Example of Supply Chain Management :(see the role of supplier in the below diagram)

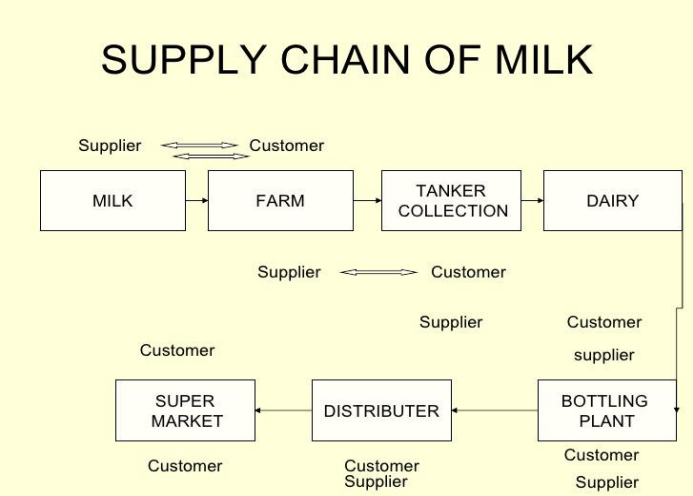


Table. Logistics vs. Supply Chain Management

Basis For Comparison	Logistics Management	Supply Chain Management
Meaning	• The process of integrating the **movement** and maintenance of **goods in and out the organization is Logistics**.	• The **coordination and management of the supply chain activities** are known as Supply Chain Management.
Objective	• Customer Satisfaction	• Competitive Advantage
Evolution	• The concept of Logistics has been evolved earlier.	• Supply Chain Management is a modern concept
How many organizations are involved?	• Single	• Multiple
One in another	• Logistics Management is a fraction (activity) of Supply Chain Management.	• Supply Chain Management is the super set of Logistics Management.
Technology	• **Transportation Management System (TMS), Warehouse Management System (WMS)**	• **Customer Relationship Management (CRM), Enterprise Resource Planning (ERP)**

Strategic Sourcing Plan:

Strategic sourcing is an institutional procurement process **that continuously improves and re-evaluates** the purchasing activities of a company.

In the services industry, strategic sourcing refers to a service solution, sometimes called a strategic partnership, which is specifically customized to meet the client's needs.

In a production environment, it is often considered one component of supply chain management. Modern supply chain management professionals have placed emphasis on defining the distinct differences between **strategic sourcing and procurement.**

Strategic sourcing is the process of developing channels of supply at the lowest total cost. It expands upon traditional purchasing activities to embrace all activities within the procurement cycle, **from specification to receipt and payment of goods and services.**

The steps in a strategic sourcing plan were defined as:

- Assessment of a **company's current spending** (what is bought, where, at what prices?).
- Assessment of the supply market (who offers what?).
- **Total cost analyses** (how much does it cost to provide those goods or services?).
- Identification **of suitable suppliers**.
- Development of a sourcing strategy (where to purchase, considering demand and supply situations, while minimizing risk and costs).
- **Negotiation** with suppliers (products, service levels, prices, geographical coverage, Payment Terms, etc.).
- Implementation of new supply structure.
- Track results and restart assessment (Continuous cycle)

The sourcing plan is the result of all planning efforts on strategic sourcing. Into this planning, all sourcing events are organized and detailed with tactical and operational information.

The sourcing team responsible for each event, when the sourcing event is supposed to begin and end based on each **RFX step (RFI-Request For Information, RFP-Request For Proposal, RFQ-Request For Quotation), the requirements, specifications of all services or materials, and negotiations/cost goals.**

The objective of the sourcing plan is to manage the timing and quality of all sourcing events in the strategic sourcing program.

Many procurement professionals continue to conduct sourcing and RFX activities manually using spreadsheets; however, this creates risk for error and gaps in the sourcing process.

DETAILED STRATEGIC PLANNING-

Many organizations use a standard format in which to create departmental strategic plans. This uniformity helps when various plans are consolidated. The common elements of a strategic plan can be outlined as described in the next subsections.

Mission and vision-

- Any strategic plan begins with a statement of mission and vision.
- The **mission statement** must set the tone for the objectives within the plan.
- The strategic sourcing plan should also contain **a vision statement**, and it should clearly align with the organization's business. It also needs to identify what value will be added by the sourcing group.
- It is equally important to communicate the statement to **all cross- functional departmental personnel.**

Environmental analysis-

- An **environmental analysis** is another traditional element of the strategic sourcing plan.
- The environmental analysis describes current conditions within the organization as well as with its **primary customers, its supply chain, and the overall market or industry.**
- Its importance lies in tying objectives to **current business conditions**

SWOT analysis-

- Plan should include a comprehensive **SWOT (strengths, weaknesses, opportunities, and threats) analysis**, traditionally used to guide plan implementers toward defining objectives.
- It can identify **potential opportunities** that help to implement the plan strategy.
- A SWOT analysis helps **identify potential roadblocks (weaknesses and threats)** and prepares the way for dealing with them through organizational strengths.

Assumptions-

- Market dynamics will continue to change throughout the plan's period, and new conditions will arise that are unlikely to be foreseen.
- **So forecast** needs to be **assumed so that the plan can go forward**.
- These assumptions must be documented.

Strategy-

- Sourcing strategy must be developed within **the scope of the overall mission statement** and ensure, to the extent possible, achieving our objectives.
- We must also ensure that our strategy addresses developments throughout the supply

chain; it may be **economic conditions (favorable)** or it may be **category or commodity shortages** that **escalate market pricing (adverse).**

Implementation-

- To implement our strategy, we require an operational strategy and a tactical approach to achieving our goals. This begins with an **operational analysis that serves to bridge the strategic plan and the operational tactic plan.**

Opportunity Analysis-

The opportunity analysis covers several elements:

- **Determine how and with whom we are spending our funds.**
- **Review spending history to find multiple items that are very similar and can be respecified to a single item.**
- **Identify poor supplier performance**
- **Improve competition**
- **Investigate outsourcing opportunities.**
- **Capture additional spending**
- **Improve internal processes**
- **Review of current market conditions.(Competitive positioning, Cost profiles, Risk, Supply chain, Technological trends, Financial profile)**

Strategy and Model:

Sourcing Business Models are a **systems-based approach** to structuring supplier relationships.

A sourcing business model is a **type of business model that is applied to business relationships** where more than one party needs to work with another party to be successful.

Sourcing business models are targeted for procurement professionals who seek a modern approach to achieve the best fit between buyers and suppliers.

All sourcing models, regardless of origin, contain the following eight essential elements:

- **Identifying the targeted spend area**
- **Creating the sourcing team**
- **Developing a team strategy and communication plan**
- **Gathering Market Information**
- **Developing a supplier portfolio**
- **Develop a Future State**
- **Negotiate, evaluate, commitment, and agree**
- **Supplier Relationship Management**

The seven models are:

- **Basic Provider Model**
- **Approved Provider Model**
- **Preferred Provider Model**
- **Performance-Based/Managed Services Model**

- **Vested outsourcing Business Model/Managed Services Model**
- **Shared Services Model**
- **Equity Partnership**

Relationship Models	Sourcing Business Models	Economic Models
Transactional Contract (Market)	Basic Provider Model	Transaction-Based
	Approved Provider Model	
Relational Contract (Hybrid)	Preferred Provider Model	
	Performance Based/Managed Services Model	Output-Based
	Vested Business Model	Outcome-Based
Investment / Vertical Integration (Hierarchy)	Shared Services Model	
	Equity Partnerships	

Basic Provider Model:

A basic transaction provider is a supplier that operates under a simple buy–sell arrangement where buyers typically pay a set "transaction" price for products or services.

***Primary purpose**:*

- Gain access to goods or services at the lowest cost
- Transaction-based economic model and **a transactional relationship model (price per unit, per activity, per hour)**
- Competitive mind-set
- Maintaining standards with broad supply options

Approved Provider Model:

An approved provider is a supplier that meets a **predefined set of qualification characteristics, quality standards, and prior proven performance** or other selection criteria.

***Primary purpose**:*

- **Leverage volumes (more purchase)**, gain pricing discounts and reduced administrative costs with fewer proven suppliers
- **Transaction-based economic model and a transactional relationship model**

Preferred Provider Model:

A preferred provider model uses a transaction-based approach, but **the buyer chooses a more strategic relational model with specifically chosen supplier(s).**

Primary purpose:

- To gain access to value-added capabilities at best value or volume discounts through a longer-term contract
- Streamline buying processes and allow for easy process of business
- Shift the procurement lens from price to value (from customer prospective)

Performance-Based Model:

A performance-based model combines a **relational contracting model with an output-based economic model.**

Primary purpose:

- **Drive efficiencies and ensure predefined service levels** with providing expertise
- Transaction-based with **output performance incentives and a relational contract model**
- Longer-term contract with the intent that the supplier invests in improvements to meet predefined service-levels and/or savings targets

Vested Business Model*:*

A Vested business model creates **highly collaborative win-win relationships in which both buyers and suppliers** are equally committed in each other's success.

Primary purpose:

- **Co-developed, co-managed collaborative solution** with expert to generate and optimize value
- A Vested model combines the **outcome-based economic model**
- Creates a **longer-term relationship** to develop solutions
- It is ideal for managing risk
- Creates a highly **collaborative environment that drives innovation.**

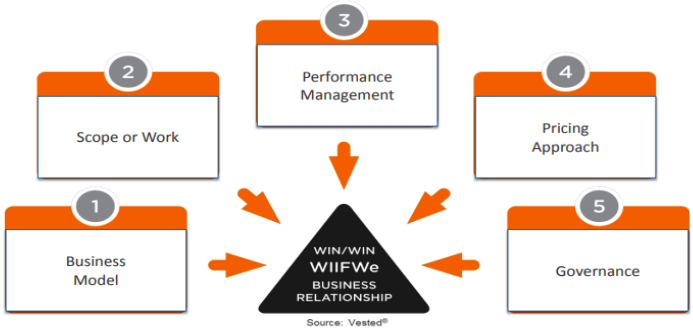


Figure: Five rules of Vested Methodology

Shared Services Model:

A shared services model creates an **internal functional business unit** that provides goods or services to an overall broader organization.

Primary purpose:

- Create **internal functional business unit (business, process, market etc)** or that provides goods or services to an overall broader organization
- An **SSO (shared service organization)** consolidates services across an organization and places them into a distinct entity designed to be competitive with "buy"solutions
- A shared services model is like an entity that creates its **own internal supplier and outsources to itself.**

Figure: Shared Services Model

Equity Partnerships:

Equity partnerships are the **second category of investment-based models along the sourcing continuum.**

Primary purpose:

- **Legally bind potential business partners** through formal structures to effectively meet business objectives
- Organizations creating **equity partnerships make a direct investment in building capabilities with a formalized entity**
- Typically asset-based with a formal and comprehensive governance framework

If an organization decides to invest in an equity partnership, they can take different legal forms:

Figure: Equity Partnerships

Architecting Equity Partnerships:

In this partnership equity capital is based **to deliver solutions to corporate and institution seller** to meet their business and financial need in timely manner.

Environmental and Opportunity Analysis

Environmental Analysis:

Definition:

Environmental Analysis is described as the process which examines all the components, internal or external that has an influence on the performance of the organization.

The internal components indicate the strengths and weakness of the business entity whereas the external components represent the opportunities and threats outside the organization.

Environmental analysis is a strategic tool. It is a process to identify all the external and internal elements, which can affect the organization's performance.

The analysis entails assessing the **level of threat or opportunity evaluations.** These evaluations are later translated into **the decision-making process**. The analysis helps align strategies with the firm's environment.

To perform environmental analysis, a constant stream of **relevant information is required to find out the best course of action.** Strategic Planners use the information **gathered from the environmental analysis for forecasting trends for future in advance.** The information can also be used to assess operating environment and set up organizational goals.

Steps Involved in Environmental Analysis:

Identifying: First of all, the factors which influence the business entity are to be identified, to improve its position in the market. **The identification is performed at various levels, i.e. company level, market level, national level and global level.**

Scanning*:* Scanning **implies the process of critically examining the factors that highly influence the business,** as all the factors identified in the previous step effects the entity with the same intensity. Once the important factors are identified, strategies can be made for its improvement.

Analyzing*:* In this step, a careful analysis of all the environmental factors is made to determine their effect on different business levels and on the business as a whole. **Different tools available for the analysis include benchmarking, Delphi technique and scenario building.**

Forecasting: After identification, examination and analysis, lastly the impact of the variables is to be forecasted.

Environmental analysis is an ongoing process and follows a holistic approach that continuously scans the forces effecting the business environment and covers 360 degrees of the horizon, rather than a specific segment.

PESTLE Analysis:

Environmental analysis is a strategic tool. It is a process to identify all the **external and internal elements,** which can affect the organization's performance.

The analysis entails assessing the level of threat or opportunity the factors might present. These evaluations are later translated into the decision-making process.

The analysis **helps align strategies with the firm's environment**. Businesses are greatly influenced by their environment. All the situational factors which determine day to day circumstances impact firms. So, businesses must constantly analyze **the trade environment and the market.**

Figure: PESTLE Analysis

The most used detailed analysis of the environment is the PESTLE analysis. Managers and strategy builders use this analysis to find where their market currently.

It also helps foresee where the organization will be in the future. The letters in **PESTLE**, also called **PESTEL**, denote the following things:

- **Political factors (P)**
- **Economic factors (E)**
- **Social factors(S)**
- **Technological factors (T)**
- **Legal factors (L)**
- **Environmental factor (E)**

P for Political factors*:* The political factors take the country's current political situation. It also reads the global political condition's effect on the country and business. Some political factors are:

- **Government policies**
- **Taxes laws and tariff**
- **Stability of government**
- **Entry mode regulations**

E for Economic factors*:* Economic factors involve all the determinants of the economy and its state. These are factors that can conclude the direction in which the economy might move. Some economic factors that affecting business below:

- **The inflation rate**
- **The interest rate**
- **Credit accessibility**
- **The monetary or fiscal policies**
- **The foreign exchange rate**

S for Social factors*:* Countries vary from each other. Every country has a distinctive mindset. These attitudes have an impact on the businesses. The social factors might ultimately affect the sales of products and services. Some of the social factors we should study are:

- **The cultural implications**
- **The gender and connected demographics**
- **The social lifestyles**
- **Educational levels**
- **Distribution of Wealth**

T for Technological factors*:* Technology is advancing continuously. The advancement is greatly influencing businesses. Technological factors will help us know how the consumers react to various trends. Firms can use these factors for their benefit:

- **New discoveries**
- **Rate of technological obsolescence**
- **Rate of technological advances**
- **Innovative technological platforms**

L for Legal factors*:* Legislative changes take place from time to time. Many of these changes affect the business environment. So, businesses should also analyze the legal developments in respective environments. Some legal factors we need to be aware of:

- **Product regulations**
- **Employment regulations**
- **Competitive regulations**
- **Patent infringements**
- **Health and safety regulations**

E for Environmental factors*:*
Some environmental factors are:

- **Geographical location**
- **The climate and weather**
- **Waste disposal laws**
- **Energy consumption regulation**
- **People's attitude towards the environment**

Advantages of Environmental Analysis:

The internal insights provided by the environmental analysis are used to **assess employee's performance, customer satisfaction, maintenance cost, etc. to take corrective action wherever required.**

Further, the external metrics help in responding to the environment in a positive manner and also aligning the strategies according to the objectives of the organization.

Environmental analysis helps in the **detection of threats at an early stage** that assist the organization in developing strategies for its survival. It identifies opportunities, such as prospective customers, new product, segment and technology, to occupy a maximum share of the market than its competitors.

Opportunity Analysis:

- The **strategic sourcing plan** needs to address procurement commodities or categories where potential opportunities for improvement have been identified.
- Improvements can take **the form of lower prices, better quality etc.**
- It is developed through an **opportunity analysis**.
- This analysis should be conducted by **a cross-functional strategic sourcing team,** preferably before finalizing the plan.
- The opportunity analysis **often uses industry benchmarks to determine where gaps** exist between best practices and current practices in our organization.

- These benchmarks developed by **industry; take into account our total annual volume (past and projected)** which are relevant in scope.

The opportunity analysis will cover several elements:

Determine how and with whom we are spending our funds:

Known **as spend analysis**, this process reviews the organization's **detailed spending history as a means to finding common items** that can be consolidated by using fewer suppliers. The added volume for the suppliers we do use should provide additional price reduction negotiation opportunities.

Review spending history to find multiple items that are very similar and can be re-specified to a single item.

It refer to this as part **standardization or value engineering,** and, **as with spending analysis**,
This is an especially productive area when the organization operates from multiple locations or when a merger or acquisition occurs.

Identify poor supplier performance:

It's usually the case that a contract is arranged between **an organization and a supplier to solve an identified problem**, to address a potential opportunity, or sometimes both.

A contract should **specify relevant performance criteria** that are agreed by all the parties. These criteria provide the basis for determining the ongoing success. But sometimes these criteria for supplier fail because of-

Supplier-side causes of poor performance can include:

- Financial difficulties
- Workforce disputes and stoppages
- Loss of or damage to production facilities (from supplier side)
- Poor relationship skills
- Misunderstanding of the organization's requirements
- Lack of robust and flexible processes
- Uncontrollable force major events like armed conflict, bad weather, economic disturbance
- Lack of agility, creativity, grit and resilience

Improve competition*:*

Do important elements of procurement strategies lack robust competition?
Do suppliers of the items routinely raise prices regardless of market conditions?
Do we have products or services that have not been supply competed for several years?

A "yes" to any of these questions may mean that it needs **to reformulate supply strategy for**

achieving the best value from these suppliers as a reward for earning our business.

Investigate outsourcing opportunities:

Outsourcing, in general, and **Business Process Outsourcing (BPO)** specifically, is a well-established, significant component of strategic sourcing. As its title implies, the focus of **BPO is on services**.

Some of the more commonly outsourced services include-

- Information technology
- Accounts payable
- Customer support
- Legal services
- Design and engineering
- Research and data analysis
- Logistics, security
- Facilities management
- Financial services
- Procurement.

The primary objectives of outsourcing are clear:

- Reduced cost through lower wages for labor
- Extension of the organization's capabilities
- A more specialized workforce
- Greater spend visibility
- Up-to-date technology
- **Temporary personnel (through recruiting)** and, importantly, the ability to meet variable demand without having to **add employees.**

In addition to business processes, organizations are also engaged in outsourcing elements of manufacturing. In fact, **electronic manufacturing services under subcontracts are likely the earliest example of outsourcing**

The outsourcing opportunity analysis should take into account geographical considerations, including the pros and cons of **off shoring (outsourcing to companies based in other countries)** or **near shoring (outsourcing to companies within the organization's national borders).**

Some aspects to consider in **globalizing sourcing activities** are the costs of currency exchange rates, taxes, transportation, and logistics, overcoming cultural and language differences, and the risk factors inherent in the local economy and geopolitical climate.

Capture additional spending:

Spending by any number of departments without procurement involvement, sometimes called "**maverick spending."**

Capturing this spending by the sourcing and procurement teams can lead to a number of benefits for the organization, such **as improved pricing through negotiation, better value through competitive bidding, and tighter control of supplier performance(cost control in supply)**.

Improve internal processes:

Organization can find ways to improve our **internal procurement process by utilizing resources engage in cost savings or standardization projects.**

Global Operational Sourcing Strategy:

A Good Global Operational Sourcing Strategy addresses the followings-

Cost: The main purpose of **product sourcing strategy (globally)** is to take advantage of lower costs in foreign countries. But the procuring organization will have to face some additional costs. These include **broker fees, freight charges, taxes called, insurance, duties and bank fees.**

Laws*:* The sourcing specialist together with the supplier should consider what body of law shall be applied to their contractual agreement, i.e**., the buyer's country's law, the supplier's country's law or the law applicable through a signed treaty between the 2 countries.(mutual agreement)**

Currency: Some buyers may insist on transactions in their own currency for the sake of simplicity. However, a prudent buyer will consider the possibility of using the supplier's currency where the buying country's currency may become

Lead time: Global purchases have a **significantly longer lead time** than domestic sources. The reason is that overseas travel is slower, unless air travel is used. In addition, there is **time taken in the custom clearance process**, which does not apply for domestic sources.

Culture and Language*:* where the procurement agent is unfamiliar with the culture and language of the supplier, the risks of misunderstanding, miscommunication and offensive/awkward encounters significantly increases. So **communication and culture** are crucial ingredients for global sourcing.

Transportation*:* whereas domestic sourcing necessitates the use of a single mode of transportation, global sourcing frequently includes multiple modes of transport, e.g., **combining air or water transportation with road transport** to bring goods from the supplier to our organization.

Methods of Payment*:* In global sourcing, **a letter of credit** is used for payment, which necessitates the cooperation of the banks of the supplier and buyer.

Global Sourcing Manager Responsibilities and Duties:

- **Develop and administer an efficient global supply chain, monitor inventory for all global products** and assist to increase growth.
- Maintain all contracts and evaluate all performance according to contract and ensure **efficient**

flow of all conditions in contract.

- **Design and implement an effective sourcing strategy** to reduce costs of financial products and manage all sourcing processes.
- Supervise all negotiations and prepare appropriate documents for same.
- **Monitor all sourcing strategies and policies** and ensure achievement of all business objectives and perform appropriate negotiations with all suppliers.
- Coordinate with vendors on all prices of products and recommend ways to **reduce costs of components and finished products** and prepare non-disclosure agreement for various sources.
- Collaborate with marketing team and initiate appropriate changes to engineering team and manage all research and development process.
- Manage all communication with global sourcing team and identify all standardized materials.
- Administer all commodity sourcing activities and coordinate with sourcing team to **consolidate processes and select appropriate materials.**
- Analyze customer requirements and **prepare appropriate contracts and negotiate for all purchase** materials.
- Develop new suppliers in various low cost regions of world.

GLOBAL OPERATIONAL STRATEGY STEPS-

The **strategic sourcing plan** is useful in guiding operational tactics. But there are some important details that should be identified when developing an operational sourcing strategy:

Current conditions.-

For each of the strategic objectives, the authoring team needs to examine existing conditions (current) and describe them in enough details so that it can be easily understood.

For example: The organization needs a **20 percent (price) reduction in procurement** governed spending. This is one of the strategic plan's objectives. However, it is quickly discovered **(current condition) that three primary suppliers are operating at a loss** (and unable to provide further discounts) and **other potential low-cost suppliers who lack capacity to handle volume.**

Gap analysis-

Current conditions and our stated objectives are obviously *not* in alignment in the example provided above.

There is a **gap between our needs and the situation in the market**. We need to identify this gap in specific terms.

Plan to bridge the gap

A typical method might be to **make up the gap in areas of spending, perhaps reducing travel expenses by conducting online meetings.** And there may be other potential solutions. The point is that we must include the intended areas of savings or cost avoidance in our plan.

Example- **IT and Digital Automation in supply**

Operational Objectives

We implement **operational objectives** through the use of tactics.

From a tactical perspective, we can achieve **our supply objectives** through a number of key operational activities.

These activities **should align with our strategic objectives** as we have defined them in the strategic sourcing plan.

Some of the most common operational objectives-

Ensure supply- One of the first considerations in operational supply management activities is to ensure that the necessary goods and services are available when needed.

Improve value-Organizations today are beginning to turn away from simply finding the lowest price and are looking more carefully at how the entire spectrum of value plays out. The Best value includes the traditional concept of **Total Cost of Ownership (TCOO)**, in which the entire **product life cycle** cost is considered.

Reduce supply risk- It is a major factor in supplier selection and thus an integral part of sourcing activities.

Risk reduction has a number of specific features, beginning with identification of potential risks and methods to mitigate them or to develop **contingency plans in proportion to the potential severity of the consequences of the risk event.**

Coordinate supplier activities- Coordinating the activities of suppliers requires an effective planning group and relatively accurate forecasts that are updated in a timely manner. It also requires specific metrics to define the supplier's commitment.

We use the term "**metrics**" in a number of different ways, but in this context we are referring to most common service levels, such as **on-time delivery, quality levels, and price reductions.**

Administer contract compliance- Contracts must be properly administered to ensure that the supply organization achieves its part of the bargain.

The sourcing group must establish a **Service Level Agreement (SLA)** that sets forth the key metrics that the **supplier is required to meet over time**. Procurement or contract administration groups must then administer **the contract by monitoring the supplier's performance** to the metrics established.

A FEW CONCEPTS REGARDING SOURCING-

Co sourcing- It is another aspect of strategic sourcing that plays an increasingly important role in sourcing and procurement activities. **The term refers to a service that is performed jointly by internal staff and suppliers.**

For example, in software development, the using organization might provide the subject matter expertise and develop the requirements, while third parties would develop the architecture and supply the software coding.

With co sourcing, the concern organization can maintain a greater degree of control and has less risk in the supply fulfillment process.

Strategicalliances- Strategic alliances are one of the more common forms of formal collaboration. They generally involve some manner of commitment to a **long-term relationship between the parties.**

Participating in this method of collaboration, there is shared risk as well as shared benefits, with both parties working toward improving their common operations.

Strong strategic alliances are created by relationships through the interaction of personnel in each of the organizations.

Strategic partnerships- It is the manner of formal agreement to **collaborate, a sharing of risk and benefits, and close professional relationships between personnel from both organizations.**

However, **strategic partnerships** often involve some form of co sourcing by the buying organization. This might include engineering or design services, manufacturing, distribution, or the development of a new product to be marketed. In some cases, **an equity investment** by one or both parties of the strategic partnership is part of the formal arrangement.

Joint ventures- A joint venture (JV) is characterized by the legal formation of an entirely new business enterprise.

A JV is commonly formed to finance an operation, with all parties participating in providing the capital and sharing in the risks and benefits.

THE SOURCING PROCESS IN SOURCING MODEL-

1. **Strategic planning.-** This is the development and alignment of the strategic sourcing strategy with the overall organizational business strategy.

2. **Research.** This segment covers an analysis of **internal requirements, market analysis, and prequalification of potential suppliers**. Prequalification means that the supplier meets the sound financial conditions required and is in **the business of supplying the products or services with competitive pricing (suitable pricing for organization as well as supplier). Prequalification** is used primarily to develop a competitive group of supply bidders.

3. **Solicitation**. We refer here to the process of preparing our **Request for ____ (RFx)**, evaluating responses, selecting the supplier, conducting negotiations, and forming a contract.

4. **Contract administration.** This is the ongoing process of monitoring the supplier's performance to the contractual agreement, ensuring compliance, conducting business reviews, and generating metrics for continuous performance improvement.

Negotiation – Nature, Strategy and Planning

Negotiation is the process of reaching agreements on matters of common interest.

Any negotiation setting will have four components:

- A negotiation set: possible proposals that agents can make.
- A protocol.
- Strategies
- A set of rules for a particular deal

Negotiation usually proceeds in a series of rounds, with every agent making a proposal at every round.

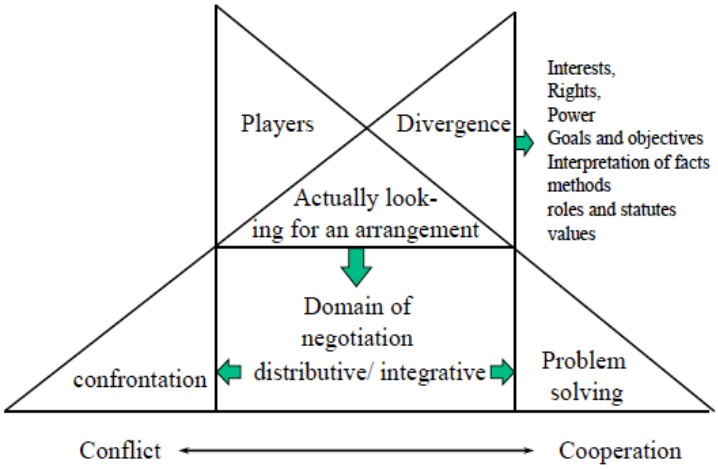


Figure: Negotiation – Nature, Strategy and Planning

There are a number of aspects of negotiation that make it complex.

Multiple issues:

- Number of possible deals is exponential in the number of issues.(Like the number of bundles in a combinatorial auction)
- Hard to compare results for case of across multiple issues

Multiple agents:

- One-to-one negotiation
- Many-to-one negotiation
- Many-to-many negotiation

Functions of a Negotiation:

- Trade and economic exchange (trading/dealing)
- Interactive decision making (joint project)
- Conflict resolution
- Drafting joint rules (institutionalization)

Scope of Negotiation:

- Sales, business, marketing
- Industrial relations (compensation, work conditions, etc.)
- Taxation control
- Company takeovers, M&A (merger and acquisition), joint-ventures, etc

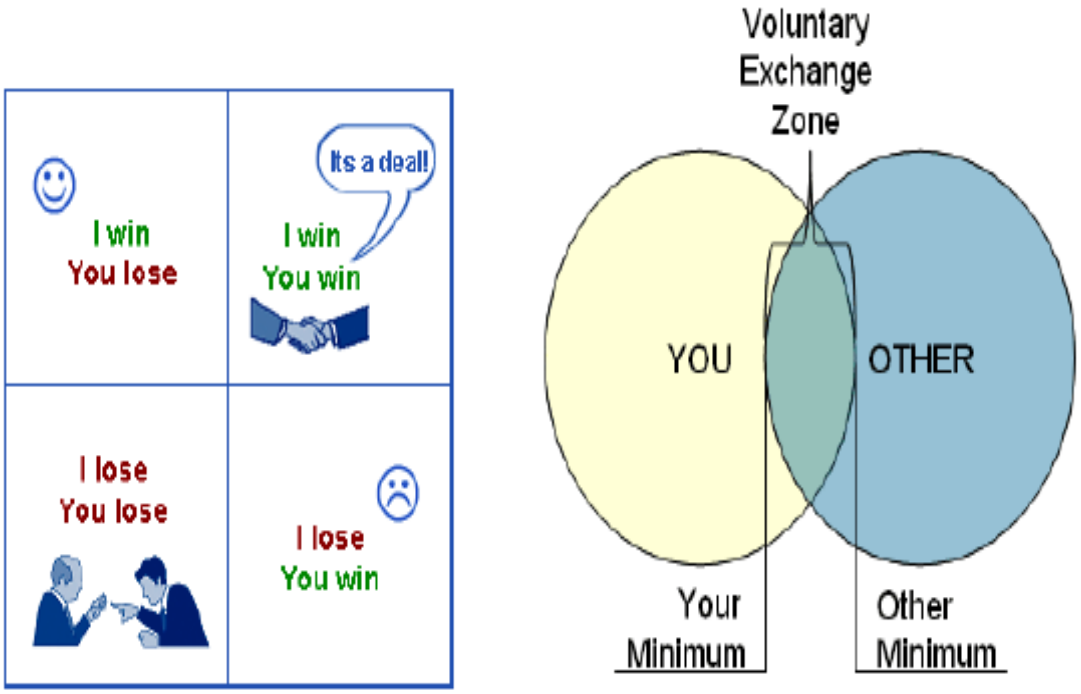


Figure: Negotiation

The Nature of Negotiation

Negotiation is **both collaborative and competitive**. It demands skill which shows the ability to deal effectively with the duality (means with whom we are negotiating) by following the process.

How Negotiation Planning is developed?

Developing Objectives:

One can develop objectives for negotiation in a number of ways.

One way is by comparing the **Request for Proposal (RFP)** response of the supplier with **whom intend to negotiate to proposals has received for the same RFP.**

Objectives should be formulated with the **SMART** concept mean that objectives are **specific, measurable, attainable, relevant, and time-bound.**

- To be **specific and measurable**, a **price reduction objective** needs to be stated.
- To be attainable**, a price reduction objective needs to be in alignment with current market trends and the supplier's ability** to sustain operations at that pricing.
- In terms of **relevancy,** a price reduction objective must apply to the **current acquisition and fall within the scope of negotiation.** To **be time-bound**, a price reduction objective needs to refer to the specific period that it covers.

Prioritizing Objectives to Match Concessions:

Objective matching with concession will save cost and give benefits to both the sides of negotiable parties.

Supplier's Objectives:

Another requirement for negotiation planning is to recognize the supplier's objectives in order to better understand what can be able to gain through an exchange of concessions.

SWOT Analysis:

Some negotiation planners like to begin their approach with a **SWOT (strengths, weaknesses, opportunities, and threats) analysis.** The analysis, discover the strengths rely on the competitive landscape.

Example- **Market status with supplier position can be analyzed through SWOT**

Figure: SWOT Analysis

Agenda/Order of Discussion*:*

If negotiator can control the order of bargaining during a negotiation, it will have a much better chance of staying on track with negotiation plan concessions.

Staying Organized:

During a negotiation, negotiation team should stay fully organized. Everyone on negotiation team attending the negotiation needs to be clear on **the order of discussion and the agreed-on objectives.**

Tactics:

In negotiation, there are situations where both parties **win and lose, or simultaneously win/lose**. As part of developing negotiation plan, it is important to determine which of the outcomes we would be willing to accept.

Creative Negotiation:

- Seek out creative outcomes
- Understand cultures, especially your own.
- Gather intelligence and know the terrain.
- Design the information flow and process of meetings.
- Invest in personal relationships.
- Seek information and understanding

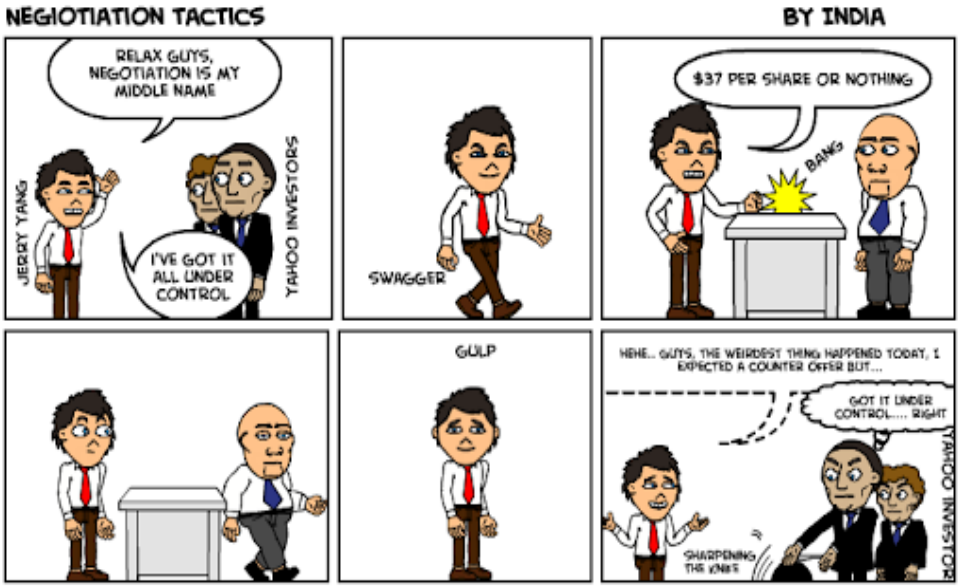


Figure: Creative Negotiation

Cross-Cultural Negotiation:

- It is easy to understand that culture plays a huge role in negotiating with companies located in another country.
- As we develop **our negotiation plan**, it needs to make adjustments according to **the nature of the business and social culture in which the supplier** is located.
- Although these adjustments mainly impact our **tactical approach, there are some strategic elements** that will need to be addressed.
- Probably the differences between cultures lie in the role of the individual, how each individual views issues, and how each communicates in a business environment. In a **cross-cultural negotiation**, these are important considerations that may determine its outcome (i.e. ease in negotiation).
- In cross-cultural negotiation, cultural differences and expectations add challenges to the negotiation process.
- The first rule of **cross-cultural negotiations is to be aware that cultural differences exist which will affect how we communicate** and **deal with the other party.**

EXAMPLE OF CROSS CULTURAL NEGOTIATION-(US BUSINESS IN JAPAN)

Japan is the country where Americans frequently do business. Behavioral rules in Japan are much different from those in the United States, and these will influence how you negotiate. For example, according to this blog post about Cross Cultural Etiquette and Manners: Japan: “A Japanese person finds it difficult to use the word "no". He may respond with "yes" to most questions but that does not

necessarily mean that he is agreeing; it may really be a "no". This knowledge will help you in carrying out business negotiations with Japanese."

Performance Measurement and Evaluation:

Performance Reviews for Negotiation Success:

Performance reviews play an integral role in the success of any business, helping both employees and management to assess strengths and weaknesses and target areas for growth and skill development.

Company prospective-

One critical skill that is often overlooked by performance reviews is negotiation .Rather than assessing negotiation, many companies subsume the skill under such headings as "**persuasiveness," "emotional intelligence," or overall "effectiveness,"** while others overlook the rubric altogether. At the same time, many companies are establishing **negotiation training or influencing training programs.**

Identify Negotiating Styles:

- When businesses fail to properly address and assess negotiation skills, they put themselves, their employees, and their business at a disadvantage. Negotiation takes place continuously throughout professional life, not only when trying to close the biggest deals. One key part of **assessing negotiation skills is to determine the negotiating style of each employee.**

- By naming negotiating styles, management is able to quickly sketch out a **general model** of each employee's negotiation skills and weaknesses.

Establish Skill Development Benchmarks:

- The companies cannot simply institute negotiation as part of the performance review process without preparing their employees.

- When adding negotiation to the **performance review process**, employers should start by establishing and explaining negotiation benchmarks for their individual company.

Creating Great Negotiators:

- **The best negotiators** know how to manage differences in ideas and values, make exchanges that increase value for the company overall, and focus on the **overall goal of the negotiation** without losing sight of the needs and desires of the client.

- These negotiators **come prepared, communicate clearly, and continuously add value for their company** through the **negotiation process**. These skills are within the reach of any employee with the proper training and oversight. For business success, now is the time to

embrace **negotiation skills** as a central part of the **performance review process.**

Negotiation Success: How to Evaluate & Measure:

1. Implement and Track Proven Negotiation Strategies:

Companies now can evaluate and enhance their employees' negotiation effectiveness by

- Setting up a strategic negotiation process
- Training them in it,
- Track and assess the extent to which their employees implement these sales and training negotiation strategies
- Measuring and comparing their results.

2. Analyze The Leverage Situation:

One primary area to track relates to leverage. Specifically, our success in any deal often will be directly correlated to what negotiator would have done.
Thus, one relatively objective way to assess a crucial element of negotiation success.

3. Evaluate the Outcome Vis-À-Vis Objective Standards:

Another crucial success element to compare is our employees' results relative to objective standards such as market value, efficiency, costs/profits and expert opinions.

Risk Management in Sourcing (Concepts):

What is a Risk?

1) A risk is an **uncertain event** which may occur in the future
2) A risk may **prevent or delay** the achievement of an organization's or **units objectives or goals**
3) Risk is the chance of something happening that will have an adverse impact on our objectives.
4) Risk is a measure of the **inability to achieve program** objectives within defined cost, schedule, and performance constraints.

Categories of Risks:

Financial:

- Reduction in funding
- Failure to safeguard assets
- Poor cash flow management
- Lack of value for money
- Fraud / theft
- Poor budgeting

Operational:

These risks result from failed or inappropriate policies, procedures, systems or activities e.g.

- Failure of an IT system
- Poor quality of services delivered
- Lack of succession planning
- Health & Safety risks
- Staff skill levels
- No process to **track contractual commitments**

Reputational:

- Organization engages in activities that could threaten it's good name
  - ✓ Through association with other bodies
  - ✓ Staff / members acting in a criminal or unethical way
- Poor stakeholder relations

Governance & Compliance*:*

- Lack of oversight by Board
- Segregation of duties not defined formally
- Ensuring compliance with funders terms and conditions(Risk)
- Risk in Compliance with applicable legislation
    - ✓ Safeguarding of vulnerable individuals
    - ✓ Taxation Law
    - ✓ Data Protection
    - ✓ Health & Safety Law

Strategic:

- Engages in activity at variance with its stated objectives
- Fails to engage in an activity that would support its stated objectives

Insurable Risk*:*

- The risks which can be recovered are **called insurable risks**. The losses which can be made good or losses for which company can get compensation from the insurance company are called Insurable Risks.

- Generally, the natural and physical risks are insurable risks, e.g., businessmen can take a fire insurance policy to get protection from flood, earthquake or from the damage of assets such as the bursting of boiler etc.

Non-insurable Risks:

- The risks for which no protection is available are called **Non-insurable risks.**

- The businessmen cannot get compensation for a change in demand or loss due to negligence or carelessness of employees.

Table: Difference between Insurable Risks & Non-Insurable Risks

Insurable Risks	Non-Insurable Risks
§ Insurable workplace health and safety risks	§ Non-insurable workplace health and safety risks
§ Insurable fraud and corruption prevention activities	§ Non-insurable fraud and corruption prevention activities
§ Unauthorised use of resources which represent an insurable risk	§ Unauthorised use of resources which represent a non-insurable risk
§ Reputation and image as an insurable risk	§ Reputation and image as a non-insurable risk
§ Fire prevention measures and security precautions	§ Crisis contingency planning and disaster recovery
§ Property loss and damage	§ Accounting controls that are not cost effective
§ Computer security	§ Loss of key staff and intellectual property
§ Professional negligence	§ Management system inadequacies and poor work quality
§ Other liability exposures	§ Failure or disruption of a major income source or investment
§ Legal liability	

Causes of Business Risk:

Natural Causes: Nature is an independent phenomenon and human beings have no control over it. Natural calamities like earthquake, flood, drought, famine etc.

Human Causes: Human causes are related to a chance of loss due to human being or employees of the organization. This can also lead to heavy loss of business condition.

Economic Causes: Economic causes are related to a chance of loss due to change in the market. There can be a change in the degree of competition. All these have a direct impact on the earnings of the business.

Physical Causes: All the causes which result in damage of assets are considered as a physical cause, for example, change in technology may result in machinery being outdated, use of old technology, mechanical defects may also result in damage of assets such as the bursting of a boiler, accident to employee etc.

Minimization of Risk:

Business has many risks but it can also be avoided by adopting some measures. Management can adopt the technique to minimize the chance of occurring any particular event which form may cause the loss. All the risks cannot be avoided but these can be minimized. So such policies are adopted which reduce the loss.

For example, there is a greater risk to send the product by air than by train. So the risk can be reduced by sending the product by train.

What is Risk Management?

It is a process to:

1) Identify all relevant risks
2) Assess / rank those risks
3) Address the risks in order of priority
4) Monitor risks & report on their management

Risk Management in Sourcing:

Procurement Risk Management Builds a Better Bottom Line:

Effective procurement risk management strategies are focused on **continuous improvement, and supported by clear, constant communication and collaboration with both (internal staff and stakeholders)** and the vendors in global supply chain.

By establishing and communicating our expectations and requirements to all parties, we can gain their engagement and help ensure they're focused on meeting our company's requirements for **accuracy, efficiency, and orders filled at the greatest speed, best prices, and highest quality available.**

Collaborating gives staff and suppliers the time and resources they need to develop solutions to the common challenges related to capacity, price, and timeframes. In turn, our company:

1) Uses resources **more effectively less waste, more profit**
2) Enjoys improved production, distribution, and customer service supported by a surprise-free supply chain
3) Gains versatility in pursuing innovation
4) **Spends less time correcting exceptions and errors and more time on high-level strategic initiatives**
5) Develops rich data for analysis and smarter decision making at all levels
6) As an added benefit, our procurement organization has a chance to identify **our strongest potential partners, and streamline our supply chain.**

Five Critical Supply Risk Mitigation Principles for our Sourcing Process:

Supply chain risk management (SCRM) is becoming a top priority in procurement, as organizations lose millions because of cost volatility, supply disruption, non-compliance fines and incidents that cause damage to the organizational brand and reputation.

As new suppliers get added, supply shifts and supply chains change, new risk enters the picture risks that go undetected unless risk management is embedded in **all key procurement activities, including sourcing.**

It is important to remember that:

When you are Sourcing, You are really changing Your Supply Chain Network:

Consideration of sourcing will always be performanance based. **It also depends on time, process of delivery, number of intermediaries involved in sourcing.** So both sourcing and SCM are directly proportional to each other. So when we are considering sourcing we have to **change SC (Supply chain)** according to situation.

Supplier Risk is Only One Aspect of Supply Chain Risk:

When organizations consider supply risk within the sourcing process, they tend to focus **on supplier specific risks** rather than the broader supply risks.

Sourcing Criteria Must Be 'Protected' and Risk Must Be Factored In:

Supply risk management is essentially about protecting supply performance outcomes. For risk factoring and sourcing criteria a balanced score card related to sourcing is essential.

Need to 'Cost the Risk' and Also Get It in the Contract:

Once we have prioritized **our supply (and supplier) KPIs (key performance indicators)**, then there must be analyzed the options for risk mitigation (e.g., **complexity reduction, early warning detection, faster recovery time, financial insurance policies, etc.)**

So that better negotiation or contracting can be done.

Must Design a Monitoring System

Monitoring for risk management with automation implementation should be mandate. Without monitoring phase designing, the system may be ruptured.

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Nature and Principles of Risk Management:

Nature of Risk Management:

Business risk is the possibilities in which a company will have lower than anticipated profits.

Business risk is influenced by numerous factors, including sales volume, per-unit price, input costs, competition, and the overall economic climate and government regulations.

Arises due to Uncertainties:

Uncertainties mean when we are not sure of what is going to happen in future.
Common examples of uncertainties are: **change in demand, government policy, technology etc.**

Essential part of any Business:

A risk is an important characteristic of business. No business can avoid risk although the degree of risk may vary.
Risk can be reduced but cannot be eliminated.

Degree of Risk Depends upon the Nature and Size of Business:

The degree of risk depends upon the type of business; for example, a business involved in fashion items bears more risk as compared to the business involved in standardized goods. Similarly, a business operating at large scale bears more risk as compared to small-scale business houses.

Profit is the Reward for bearing the Risk:

The business earns a profit because they are bearing risk."No risk no gain" larger the risk more is the profit. An entrepreneur bears risk with **the expectations of earning a profit.**

Principles of Risk Management

Risk management is the identification, classification and prioritization of risks. This is generally done in tandem with efforts to monitor, control and mitigate the risks.

The principles for risk managements are-

- It should be **an integral part of the organizational** process
- It should factor into the overall decision making process
- It must explicitly address uncertainty
- It should be **systematic and structured**
- It should be based on **the best available information**
- It must take into account human factors
- It should be transparent and all-inclusive
- It should be dynamic and adaptable to change
- It should be **continuously monitored and improved** upon as the project moves forward

Risk Management Process:

There is a specific procedure that one should follow when it comes to performing a risk assessment. The overall process can be itemized as follows:

- **Identification** – Perform a brainstorming session where all conceivable risks are itemized
- **Planning** – Once defined, plan for contingencies as part of the overall project plan;
- **Derive Safeguards** –What are the safest outcomes of risk management, that have to be identified.
- **Monitor** – Continuously monitor the project to determine if any defined (or un-expected) risks manifest themselves

Figure: Risk Management Process

Risk Management Cycle:

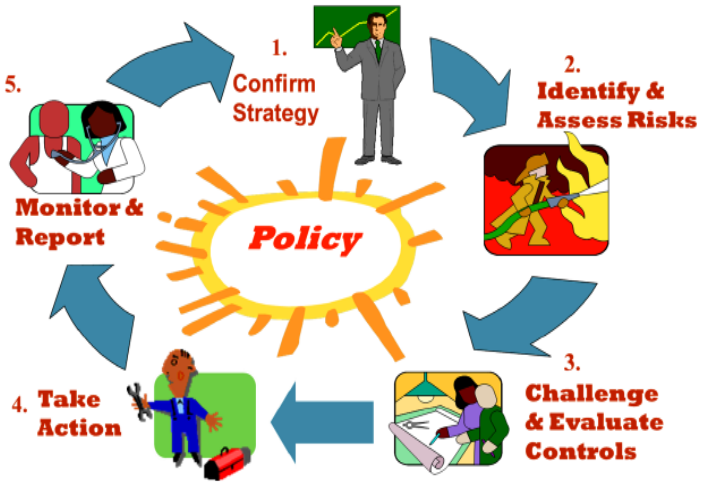
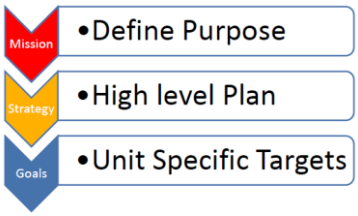


Figure: Risk Management Cycle

Risk Management Cycle – Step 1:



Risk Management Cycle – Step 2:

Risk Identification – what are the threats and uncertainties associated with our organizations?

- Separate out the risk into its cause & possible effect
- Be concise & clear
- Prioritize the risks

Risk Management Cycle – Step 3:

Challenge & Evaluate Controls

- Control: Policy, action, procedure or process designed to prevent risk or to limit its impact

Risk Management Cycle – Step 4:

Take Action!

- For serious risks where controls are Weak and Absent
- Examine Cost vs. Benefit

Risk Management Cycle – Step 5:

Monitor & Report

- Use a standard format for capturing risk data e.g. a **"Risk Register"**
- Review all risks at least annually
- Serious risks to be reviewed more often **depending on circumstances**
- Report on risk to senior management / Board
- Make **Risk Register available to stakeholders** to show good governance

Dealing with Risk Management:

Once the risks are identified and the specific risk process has been instantiated.
There are actually certain techniques to be aware of risk.

- **Avoid the Risk** – There are instances where risk can be avoided entirely.
- **Reduce the Risk** – While some risks cannot be avoided, they can be reduced.
- **Share the Risk** – If a certain risk cannot be avoided or reduced, steps can be taken to share the risk in some way.
- **Retain Risk** – This is actually a **Judgment call**. Once all options are exhausted, the team members, sponsor and project manager may just decide to retain the risk

Risk Management Tool and Technique:

Expert knowledge:

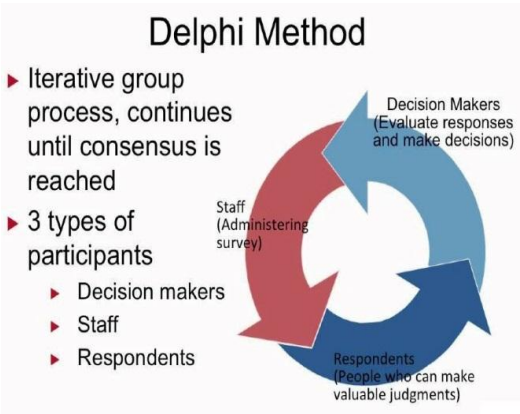
Expert knowledge relies on the experience of people who have worked on similar sourcing operations in the past. **Interviews with individuals, stakeholders, and experts are good methods to use to gather expert knowledge**.

Historical Information:

- The team member may have compiled a historical database of risks encountered in previous sourcing efforts and contracts.
- It will be useful if organized the **database by contract type** and include a list of the problems encountered that can be identified as risks.
- **Records of previous contracts can also provide historical information**. These records may be kept in a database, or they may be paper files.

Brainstorming:

Another technique frequently noted is to identify risks and sources of risk by conducting a brainstorming session.
A variation of brainstorming often used is called the **Delphi method.**



Simulations:

- Several analysis tools are commonly available for providing simulations. **Simulation** which is frequently used is the **Monte Carlo simulation.** Monte Carlo simulation provides the user with a range of possible outcomes and the probabilities they will occur for **any choice of action (related to risks).**

- The **decision tree diagram** is also a useful simulation tool that can depict key interactions among decisions.

Checklists:

Through research, it may be able to develop a **useful checklist** to run through whenever needed during sourcing activities. It can use historical data that applies to similar activities in organization or find related information through a **well-directed Web search.**

Sourcing Activities:

Sourcing activities should clearly be defined **without any ambiguity**. So that in each activities risk can be easily identified.

Managing Risk in International Business:

- Business risk comes in a variety of **tangible and intangible** forms over the course of the business life cycle.
- Some risks occur during the **ordinary course of corporate operations**, while others are due to **extraordinary circumstances** that are not easily identified.
- Regardless of a company's business model, industry or level of earnings, business risks must be identified as a **strategic aspect of business planning**.
- Once risks are identified, companies take the appropriate steps to manage them to protect their business assets.
- The most common types of risk management techniques include **avoidance, mitigation, transfer, and acceptance.**

Avoidance of Risk:

The easiest way for a business to manage its **identified risk is to avoid** it altogether. In most of the cases, avoidance takes place when a business refuses to carry a risk of any kind.

A hospital or small medical practice may avoid performing certain procedures known to carry a high degree of risk to the well-being of patients. Avoiding risk is a simple method to manage **potential threats to a business**. But at the same time we have to take care for loss in **revenue potential.**

Risk Mitigation:

Businesses can choose to manage risk through mitigation or reduction. **Software companies** mitigate the risk of a new program not functioning correctly.

Transfer of Risk:

In some instances, businesses choose to **transfer risk** away from the organization. Risk transfer typically takes place by paying a premium to an insurance company in exchange for protection against substantial financial loss.
For example, **property insurance** can be used to protect a company from the costs incurred **when a building or other facility is damaged.**

Risk Acceptance:

Risk management can also be implemented **through the acceptance of risk**. Companies retain a certain level of risk brought on by specific projects.
For example, pharmaceutical companies often utilize risk retention or acceptance when developing a new drug.
(Drug for corona.)

A Model for Risks and Opportunities in Global Sourcing:

It is important to **evaluate the total risk** associated with the **economic viability and success of global sourcing decisions**. The important keys taken for consideration are-

1) The time difference between **the supply of domestic and international deliveries;**
2) The need for flexibility;
3) The importance of service levels;
4) The **logistical costs**;
5) The objective **quality and / or complexity of the product**;
6) The stability of the country /region/currency of the foreign suppliers.

To compare these factors, it is possible to develop **a simplified decision framework** for **the first assessment of the risk associated with global sourcing decisions.**

It ranks each factor on a **five-point Likert scale** (where one indicates low importance / value / cost and five high importance /value /cost).

The risks should be carefully evaluated and if necessary remediated. Each case of global risk must be examined.

MODEL FOR RISK AND OPPORTUNITY IN GLOBAL SOURCING FOLLOWS-

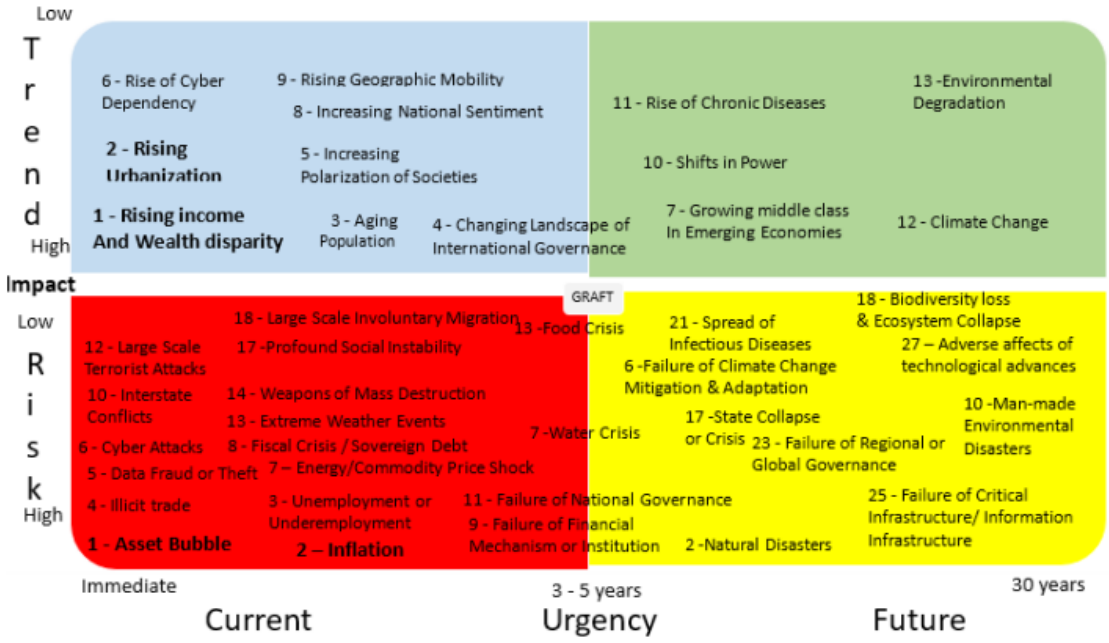
STEP 1**. Articulate key strategies (Our Vision, Our Mission, Our Values, Risk and Compliance Culture)**

STEP 2**. Identify strategic assumptions**

STEP 3**. Review and understand global risks and trends**

STEP 4**. Rank and prioritize global risks and trends**

STEP 5**. Map global risks and trends on to graft**



(RISK MAPPING IN CORPORATE)

Supplier Research and Market Analysis

Supplier Research and Market Analysis:

Supplier Research*:* It is the process of obtaining information for sources specific to the item (product or service) being acquired in order to facilitate competitive practices and supplier selection.

Market analysis: It is the process of gathering relevant information from economic indicators and emerging trends within the particular industry and the competitive environment of the product or service we are sourcing.

Supplier research and market analysis, taken together, provide the basis for us to understand what products and services are available, who the most qualified potential suppliers are, and how the market for that particular product or service operates.

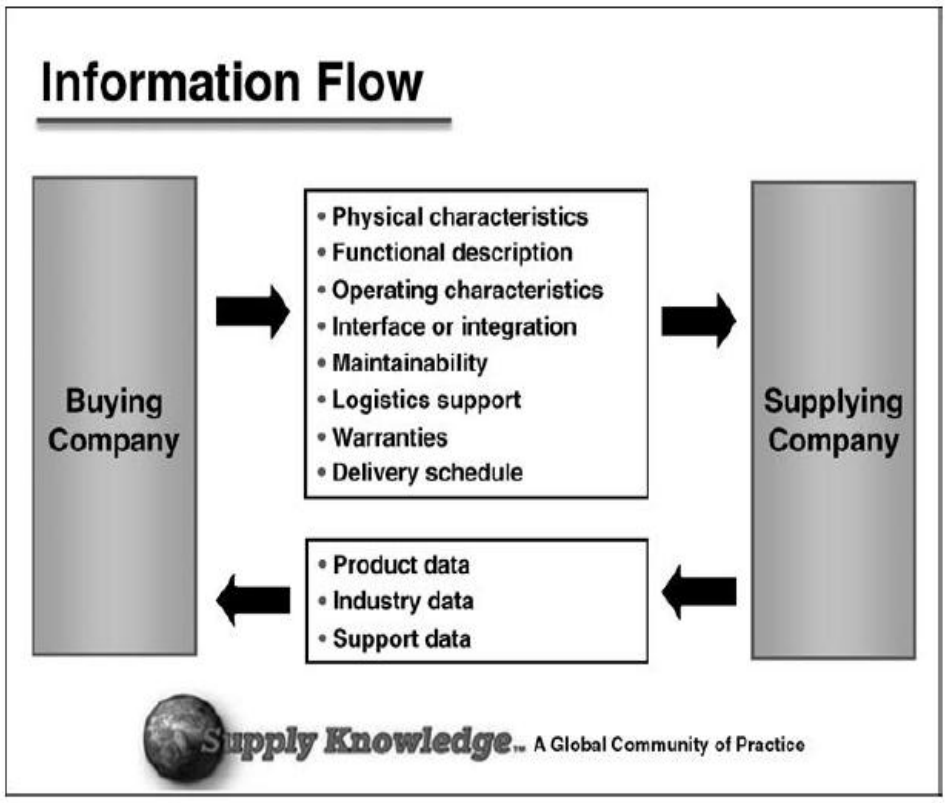


Figure: Information Flow in Supplier Research and Market Analysis

Conducting Supplier Research:

Supplier research is used in sourcing for two main purposes:

- **To identify qualifiable suppliers or contractors** who can provide goods or services to our organization. From this above statement, we mean suppliers who have been **screened and meet the capability, financial, and capacity requirements for the current requirement.**
- **To determine an appropriate strategy for solicitation, evaluation and assembling the bidders' list.** This strategy is based on both **supplier research and market research,** which, taken together, establishes the basis for our acquisition and sourcing plan.

Methods and Techniques for Locating Potential Suppliers:

These include:

Experts: These should include in-house expertise and commodity centers.

Current Suppliers: Often they have in-house category information and solutions that may meet our sourcing requirements.

Other Recent Market Research: Check files for similar purchases.

Requests for Information: These are formal methods for obtaining comparative data of suppliers.

The Internet: The Internet is a useful source of information for finding potential supplier.

Online Databases: Industry web sites and consolidated catalog sites provide useful information.

Source lists from other sections within our organization.

Product Literature*:* Often we must **specifically request data (from the supplier, but sometimes we can find it easily on the supplier's web site.**

Trade Shows*:* Trade shows can be especially valuable **when sourcing new products that will be used extensively and potential new sources of supply.**

Professional Associations*:* For example, the National Institute for Automotive Service Excellence and the Institute of Electrical and Electronic Engineers (IEEE) maintain product standards.

Market Research Firms: Many companies specialize in developing detailed market analysis.

Conducting Market Analysis:

Market analysis is an important tool for **gathering information about pricing and availability trends, inherent risks in a particular industry.**

We can learn who the key suppliers are and what advantages they offer.

Analyzing the Market:

One of the **primary objectives of market analysis** is to develop an awareness of the opportunities and threats evolving in the particular market. The outlines the major categories of market analysis are:

- Market size (current and future)
- Market growth rate
- Market profitability
- Industry cost structure
- Distribution channels

    - Market trends
- Key success factors (related to market)
- **Market Size:** It shows the level of market i.e. how many potential supplier and marketers are associated in market.
- **Market Growth Rate:** The rate of growth in any particular market segment will tell us whether there will be market capacity available. There are a **number of forecasting and statistical techniques** available for finding market growth rate. Example- **Regression Analysis of market growth**
- **Market Profitability:** Many factors influence profit, including the balance of supply and demand, new firms and competitive nature of the market.
- **Industry Cost Structure*:*** We can use our knowledge of the market's cost structure to identify current and emerging opportunities **for leverage and negotiation planning** purposes with suppliers.
- **Distribution Channels:** A shorter pipeline or supply chain (distribution channels) generally ensures faster response times with fewer inventories and a less cost.
- **Market Trends**- **Fluctuations in price and availability** are common in all markets. Supply and demand vary and affect prices depending on the complexity of the supply chain. Understanding these trends in the market will help to get idea of present market scenario.
- **Key Success Factors**: Advanced technology, higher quality and satisfaction levels, and economies of scale are some of the key factors for success within given market.

Determining Changing Marketplace Factors:

- **Supply and demand** continually interact to produce varying pricing profiles. Organizations wish to continually work with the most price-competitive suppliers who stay up to date on the **latest technological advances and business methods.** So changing market factors must be determined which are discussed below-

- **Economic Conditions*:***

  Supply and demand forces continually drive prices up and down. As economic conditions change, demand increases or declines, generating shortages or excesses in supply at any given time. So this type of analysis will give better analysis for changing pattern of market.

- **Market Complexity:**

  Optimization technique has to be adopted to know the point where market complexity arises.

- **Nature of Competition*:***

  The nature of competition in any particular market varies. By changing trend of market it can be cooperative, rival, monopolistic, oligopolistic etc.

- **Analysis of Technological Trends**:

  New technology frequently generates new opportunities for capital investment, and emerging businesses tend to gear up everywhere.

- **Performance:**

  Performance changes with respect to change in market trend in supply aspect.

Vendor Rating – Objectives

What is Vender Rating?

1) **A vendor is any person or company that sells goods or services to someone else in the economic production chain.**
2) Vendors or suppliers are given title according to their attainment of some level of performance, such as **delivery, lead time, quality, price, or some combination of variables**.
3) It may take the form of a hierarchical ranking from poor to excellent for some firms; it may come in the form of some sort of award system or as some variation of certification.
4) It is a direct result of the widespread implementation of **the just-in-time concept.**

Figure: Vendor Rating

Objectives of Vender Rating:

- To help the buyer in future selection
- To provide buyer with the information helpful in subsequent negotiation
- To provide the buyer with the important information which he can act upon any corrective measures.

Vendor rating is usually evaluated in the areas of risk, 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.

Price stability. Prices should be reasonably stable over time.

Price accuracy. There should be a low number of variances from purchase-order prices

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.

Quality factors include*:*

- Compliance with purchase order, contract or agreement.
- Conformity to specifications
- Reliability in **performance**
- Reliability of repairs
- Durability(time)
- **Support(Quality, performance support etc)**
- Warranty(The length and provisions of warranty protection offered should be reasonable)
- Enhancements. The vendor should consistently refresh product life by adding enhancements and **continuous process improvement**

Benefits of Vendor Rating:

1) Helping **minimize subjectivity in judgment** and make it possible to consider all relevant criteria in assessing suppliers.
2) Providing feedback from all areas in one package.
3) Facilitating **better communication** with vendors.
4) Providing **overall control** of the vendor base.
5) Requiring specific action to correct **identified performance weaknesses**.
6) Establishing continuous review standards for vendors, thus ensuring continuous improvement of vendor performance.
7) Building vendor partnerships**, especially with suppliers having strategic links**.
8) Developing a **performance-based culture.**

Demerits of Vendor Rating:

1) Inexperience with Products and Services(Inexperience in not visioning holistic aspects with vendoring)
2) Unfamiliarity With Corporate Operations
3) Resistance Within Company
4) Threat to Security

How the Vendors are rated?

Vendors are rated on the basis of various characteristics:

- **Time delivery**
- **Quality**
- **Price**
- **Others actors (such as Supplying useful market information & Meet emergency order).**

8 Major Rating Plans are utilized for Vendor Rating:

A vendor's performance in meeting the quality, delivery and price standards set by the buyer has to be assessed in a systematic manner.

Techniques of Vendor Rating:

The purchase organizations watch his enlisted suppliers continuously and take requisite corrective action. Following rating plans are utilized for vendor rating:

- Categorical plan
- Weighted point plan
- Cost ratio method
- Evanston's vendor selection
- Forced decision matrix
- Service cost ratio
- Bell quality rating system

Categorical Plan:

- The categorical plan is a sample of all vendor rating schemes.
- It relies **heavily on the judgment and experience of the decision maker**. The purchaser maintains a list of his suppliers and their products.
- The vendor performance is reviewed periodically by an evaluation committee comprising of all representatives.
- Depending upon the performance, the vendor is given a **plus point, neutral or minus**.
- The performance trends over a period of time are built up and the vendor with increasing trend of plus point is chosen.
- On the basis of experience and periodical meetings, a list of factors can be established on the suppliers' performance in each area and each factor is given a grading as **'never', 'seldom', 'usual', 'always',** etc. This system, **though non-quantitative**, provides a means of systematic record keeping on performance criteria.

Weighted Point Plan:

- Quality, delivery or service and price are the three most important attributes of a good supplier.

- Depending upon the importance, a purchaser attaches to a particular attribute. He fixes a weight age for it. **The total weight ages are being 100.**

- The weight ages, for example, of the attributes are as follows: **Quality — 60%, Delivery — 25% and Price — 15%.**The quality rating (Table), delivery (service) rating (Table), price rating (Table) and composite rating (Table) are calculated below.

Table . Quality Rating

	Lots Received	Lots Accepted	Quality Control Rating
Supplier X	90	80	$\frac{80}{90} \times 60 = 53.33$
Supplier Y	100	90	$\frac{90}{100} \times 60 = 54$
Supplier Z	70	60	$\frac{60}{70} \times 60 = 51.42$

Table . Delivery (Service) Rating

	Lots Received	Lots Received According to Promise	Delivery (Service) Rating
Supplier A	90	70	$\frac{70}{90} \times 25 = 19.44$
Supplier B	100	80	$\frac{80}{100} \times 25 = 20$
Supplier C	70	80	$\frac{60}{70} \times 25 = 21.42$

Table . Price Rating

	Lots Received	Price Rating
Supplier A	Rs. 13.50	$\frac{13}{13.50} \times 15 = 14.44$
Supplier B	Rs. 13.00	$\frac{13}{13} \times 15 = 15$
Supplier C	Rs. 14.50	$\frac{13}{14.50} \times 15 = 13.44$

Table . Composite Rating

	Supplier A	Supplier B	Supplier C
Quality	53.33	54	51.42
Delivery	19.44	20	21.44
Price	14.44	15	13.44
Total Rating	87.21	89	86.28

- The weighted point plan technique enables a purchaser to evaluate a supplier on quantitative basis. This plan is more objective than categorical plan and the only way the subjectivity can enter is while assigning the weights.

Cost Ratio Method:

- This method relates to **identifiable purchasing and receiving costs to the value of shipment** received from respective suppliers.

- The **higher the ratio of costs to shipments, the lower the rating applied to the supplier: Quality, delivery, service and price** are the usual categories to which costs are allocated, after subdividing each factor into various elements.

- The respective cost ratios are suitably combined with the **vendors' quoted price, to determine the net cost**. Here, the vendor performance is reviewed periodically **by an evaluation committee comprising of representatives from all departments** involved with purchasing.

Eavaston's Vendor Selection:

The suppliers' past performance is utilized in the choice of vendors and the basic steps in this method are as follows:

(I) **The vendors on the approved list are ranked on the basis of the buyer's subjective evaluation,**

(II) The **first satisfactory vendor, meeting or exceeding** all the standards, then its okay for procurement team of organization/ buyer.

(III) The applied vendors **do not fulfill the minimum standards**, and then the minimum standard may be relaxed till a vendor is chosen.

Forced Decision Matrix Method:

- The attributes of rating like price, quality, service, reliability of the supplier, lead time of supply etc. — are identified first.

- Then these factors are compared between themselves, like quality and price. If price is considered more important than quality by the evaluation committee, then a **weight age of one is given to price and zero to quality**.

- The quality is compared with each of the remaining factors and the relative weight ages are recorded in the form of a table or matrix.

- Similarly, each factor is compared in turn with each **of the others and their relative weight ages are recorded**. **Weight ages given to the different attributes are added up for each**

attribute and divided by the total number of comparisons to give the attribute weight age co-efficient for each attribute.

FINAL STEPS-

After this, the next step is to compare the suppliers in pairs in respect of each attribute, giving the superior supplier a weight age of one and the other. These results are tabulated and the supplier weight age co-efficient is thus obtained.

The above two types of coefficients are combined by **multiplying for each attribute and for each supplier**. These are then added up to give the total weight age and this is ranked to take the appropriate decisions on the vendors. The weight age can be **varied and the matrix can be suitably built for a large number of suppliers and evaluators.**

Service Cost Ratio:

There are other intangible aspects of a supplier's services. They can only be measured subjectively. The procedure is as follows:

i. Listing the service factors like R&D, Labor stability, financial stability, flexibility in production for rush orders, etc.

ii. Assigning weights to each factor according to its importance to the purchaser.

iii. Setting an acceptable norm e.g., out of a total of a 100 service points 70 may be an acceptable norm.

iv. Rating suppliers for each service factor.

v. Determining the percentage by which the supplier is over or under the acceptable norm.

vi. Multiplying the percentage obtained in (v) by value of package percent. For sophisticated items the value of package percent may be 10% and for common Bazaar items it may be just 1%.

The percentage figure arrived at in (VI) is minus if the percentage in (v) is over the acceptable norm and is plus if it is below the acceptable norm.

The sample procedure of calculating the service cost ratio is shown in table below.

Table . Service Cost Ratio

Service Factor		Supplier A	Rating Supplier B	Supplier C
1. Financial stability	20			
2. Labour stability	10			
3. R&D	10			
4. Quality of staff	10			
5. Production flexibility for rush orders.	10			
6. Location far and near	10			
7. Precision machinery	10			
8. Inventory holdings	5			
9. Co-operativeness	5			
10. Others	10			
Total poinits	100	90	49	42
Acceptable service rating 70%		$100 - \frac{90}{70} \times 100 = -30\%$		
over acceptable (minus)		$100 - \frac{49}{70} \times 100 = +30\%$		
Under acceptable (Plus)		$100 - \frac{42}{70} \times 100 = +40\%$		
Service Cost Ratio		$-30 \times 10\% = -3\%$	$+30 \times 10\% = +3\%$	$+40 \times 10\% = +4\%$

Bell Quality Rating System:

The bell helicopter company developed a **Lot Quality Index (LQI),** which gives **an assessment of all lots received against lots rejected, by disposition and category**, as the company attaches greater importance to **quality**. The **LQI is** given by: **$LQ_1 – X/L$,**

Where L= total number of lots received during the period,

$x = (L_1 \times 1.00) + (L_2 \times 2.10) + (L_3 \times 2.90) + (L_4 \times 3.10) + (L_5 \times 3.90)$

L_1 = Number of lots acceptable as received
L_2 = Number of lots rejected by sampling inspection but labeled.
L_3 = Number of lots rejected and disposition, rework at supplier's end.
L_4 = Number of lots rejected and disposition, returned not usable

L_5 = Number of lots rejected and disposition rework at Bell helicopter company.

The weights 1.00, 2.10 etc. were determined at the company after a careful study of the complexity and number of operations required to have a **usable lot from a particular dispositioned lot.**

It is clear from the above equation, **that the best lot quality index figure rates is 1.0, the worst is 3.90**. The formula can be modified easily to suit the needs of a particular firm. The quality rating can be combined with rating for other parameters, to develop suitable vendor rating schemes.

IBM Quality Rating System:

The IBM rating system uses **quality costs as the basis for rating suppliers.** The formula for the vendor quality rating is:

VGR = Desired cost of inspection / Actual cost of inspection x 100

The cost incurred **in inspecting acceptable material is the desired cost, the cost of inspecting rejected material being excluded from it.**

The actual cost of inspection includes cost incurred in **inspecting acceptable as well as rejected material plus cost associated with extra handling of rejected material**.

Inspection cost is obtained by multiplying the actual time spent on inspection by the standard rate.

Advantages:

The IBM quality rating system the following advantages:

- Factors of cost used are well understood by the suppliers
- All rating factors are brought down to **common basic costs** and can therefore be combined even if the factors themselves are different.
- Some **minor defects are allowed**, so long as the quality requirements are clearly met.
- It establishes a **long range goal of what a good supplier should supply.**
- **No complicated weighting factors** are required.
- When cent percent inspection is required, it provides for **equitable rating**.
- When cent percent inspection is required, it considers the **inspection cost.**

The IBM system on quality rating is useful, when there are a **large number of suppliers vending several products**. The inspection information is fed directly into the computer (or accounting machine), which computes the ratings and summarizes the information in various ways, like **type of defects, part number, supplier code, final product etc. for further analysis.**

Self-Certified Vendor Management:

Vendor:

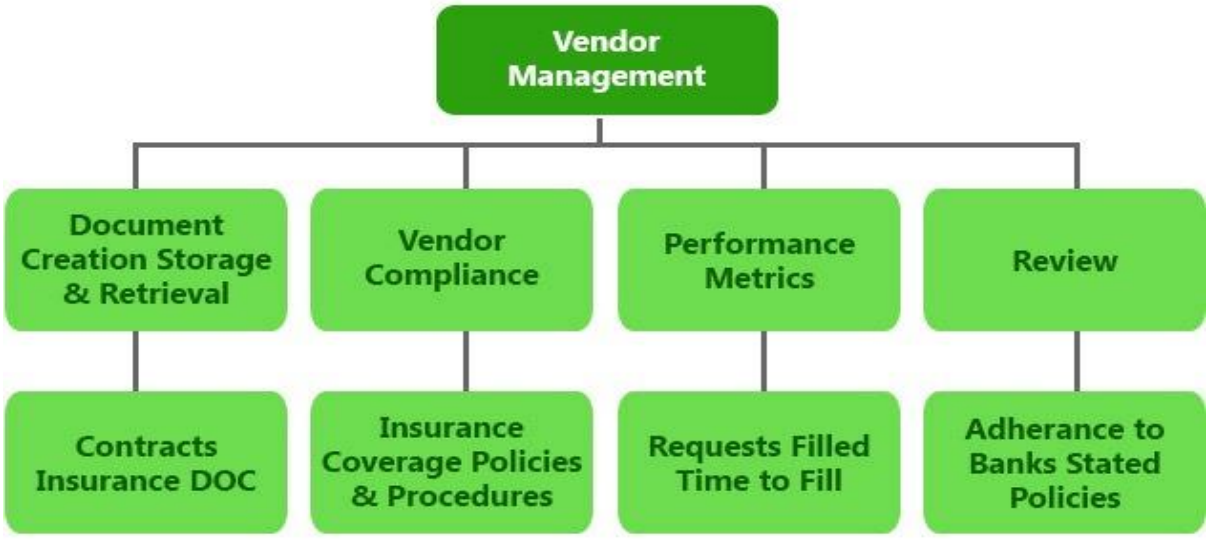
A vendor is a person or organization that vends or sells contingent labor. Specifically a vendor can be an independent consultant, a consulting company, or staffing company (who can also be called a supplier – because they supply the labor or expertise rather than selling it directly).

Vendor Management:

The term vendor management is used when describing the activities included in **researching and sourcing vendors, obtaining quotes with pricing, capabilities, turnaround times, and quality of work, negotiating contracts, managing relationships, assigning jobs, evaluating performance, and ensuring payments** are made. It requires a lot of skills, resources, and time.

Vendor management is about **streamlining the process for heightened efficiencies and managing vendor relationships** to ensure that the agreements made are mutually beneficial for both parties. Typical Vendor Management activities can include:

1) Vendor sourcing, appraisal and negotiations
2) Contract creation and agreement
3) Reporting and **KPI(Key Performance Indicator) tracking**
4) Arranging and conducting **QBRs (Quarterly Business Reviews)**
5) Compliance monitoring and security testing
6) Recording escalation processes and key contacts
7) Resolving disputes



Vendor Management Processes:

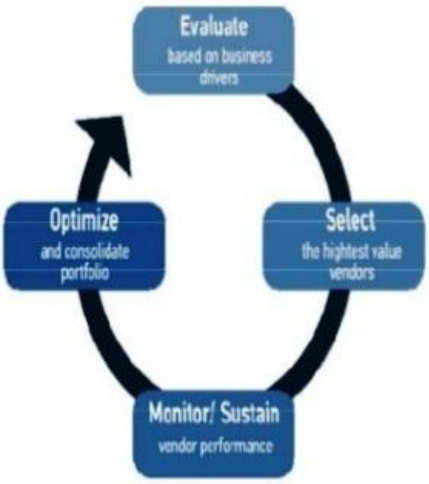
With effective vendor management processes, we can properly establish service, quality, cost, and satisfaction goals and choose and manage third-party suppliers that help us achieving those business goals. Vendor management is typically broken down into **four steps**.

- **The first is the establishment of the business goals**. It's much easier to select and manage vendors when we have clearly defined performance parameters to compare and contrast.

- The **second part of the process is to select the best vendors** that will be able to match our company's performance characteristics. Every vendor will have its strengths and weaknesses, and choosing the right one is a very critical task to optimizing operational results.

- **Third is managing suppliers**. On a daily basis, our vendor managers will need to monitor performance and output, ensure contract terms are being followed, approve or disapprove changes, provide feedback, and develop relationships through effective communication, honesty, and integrity.

- Finally, **the fourth aspect of vendor management is meeting goals on a consistent basis**. This requires continuous work in influencing vendors to meet performance objectives to ensure profitability.



Life Cycle Of Vendor Management

Manage and Measure

- Centralize vendor information.
- Track and monitor vendor commitments — contractual or otherwise .
- Establish alerts to ensure commitments are met, issues addressed, and renewals tackled.

Application Area of Vendor management:

Vendor management typically delivers value to a business across several different areas, including:

Cost control, either through identification **of opportunities for consolidation or through timely renegotiation around renewals**

Benefits realization - Proactive Vendor Management and continuous contact mean that **the original terms of a contract can always be kept in mind**. By pushing vendors to deliver, and smoothing the way internally as well, VM (Vendor Management) helps get businesses towards achieving goals faster.

Supply chain resilience and continuity - by maintaining a constant dialogue with key vendors, our business can assess any ongoing risks to supply so it is wise making alternative plans in a timely if required.

Compliance - periodic assessment of **compliance (with respect to vendor)** becomes easier and this ensures that any risk associated with legislation or industry standards is minimized.

Innovation - Businesses are looking to grow and develop new technologies. By having close relationships with vendors and managing them well, good vendor management can place our business in pole position to take advantage of advancements in their products or services.

Factors Involved- Certified Vendor Management:

Vendor qualification: The first step of vendor management is determining whether or not a vendor has the expertise and capability to fulfill the business need. There is two types of vendor qualification: **pre-qualification (for potential vendors) and re-qualification (assessment of active vendors).**

Vendor on boarding: Approved vendors are then on boarded into the organization's database. This stage involves the process of collecting, capturing, and storing all relevant vendor information in a centralized database.

Ordering and delivery: Typically, either a **purchase order or a contract** initiates the order process. The specifications are listed out clearly in a **terms of reference (TOR) or Statement of Work (SOW).**
Once order is fulfilled, the received goods/services are subjected to a quality check and the vendor's performance is evaluated.

Vendor payment: After receiving the goods/services, the buyer needs to match the invoice with related purchase order. If everything seems to be in order, **the invoice is approved** and forwarded to finance for payment processing. In the case of **discrepancies, the invoice is rejected back to the vendor.**

Vendor off boarding: When **a contract ends or a long-term vendor relationship terminates**, it is critical to remove the vendor from finance and administrative records. Failure to do so might result in compliance breaches, loss of valuable organization time and costs.

Vendor Certification Procedure:

Supplier / vendor certification is an important component of our total quality management system that assures that a supplier's product is produced, packaged, and shipped under a controlled process which results in consistent conformance to our requirements.

The primary objective of the certification process is to **assure consistent high quality** as demonstrated by predictable conformance to our requirements.

The procedure for vendor certification is given below;

- Initiate a Quality audit of the supplier.
- Liaise with supplier to enhance their understanding of company requirements.
- Create or review and update the relevant **Raw Material Control Test Methods** to reflect required testing terminology, requirements and methods.
- Together with Procurement, present a report to the **Management Certification Committee** requesting **certification of the supplier**. The report is composed of typically the following; quality supply history, delivery performance, Project plan, Change Control request, audit information, Supply agreement, a Certificate of Analysis from the vendor, supplier inspection

- **Produce a Certificate to be presented to the successful vendor**

Criteria and Methods of Vendor Rating:

Vendor Rating Methods:

Categorical plan*:*

- This is a very subjective method.
- Mangers from concerned department prepare list of factors important from their views.
- Each of the major suppliers is evaluated against each evaluator's list of factors evaluation is done in the terms of
    - Good
    - Satisfactory
    - Poor

Weighted point plan:

The buyer decides on;

- Factor important form evaluation
- Weight ages for each factor
- **The vendor performance** in respect of each factor

Cost ratio plan:

Under this method, the vendor rating is done on the basis of various costs incurred for procuring the materials from various suppliers. The cost ratios are ascertained for the different rating variables such as quality, price, timely delivery etc. The cost ratio is calculated in percentage **on the basis of total individual cost and total value of purchase.**
Example: The total delivery cost is Rs5000 and the total purchases are Rs 1,00,000 then delivery cost ratio will be 5,000 / 1,00,000 x 100 = 10%

Supplier Evaluation and Selection (Concepts):

Once the **portfolio analysis (related to supply)** is completed, the **buyer must evaluate individual suppliers** as to their suitability. The ultimate result is to make supplier recommendations, so the buyer must first identify current and potential suppliers.

The overall objective of the evaluation process should be to **reduce procurement risk and maximize overall value to the buying organization**. Figure below summarized all the critical steps involved in the supplier evaluation and selection process.

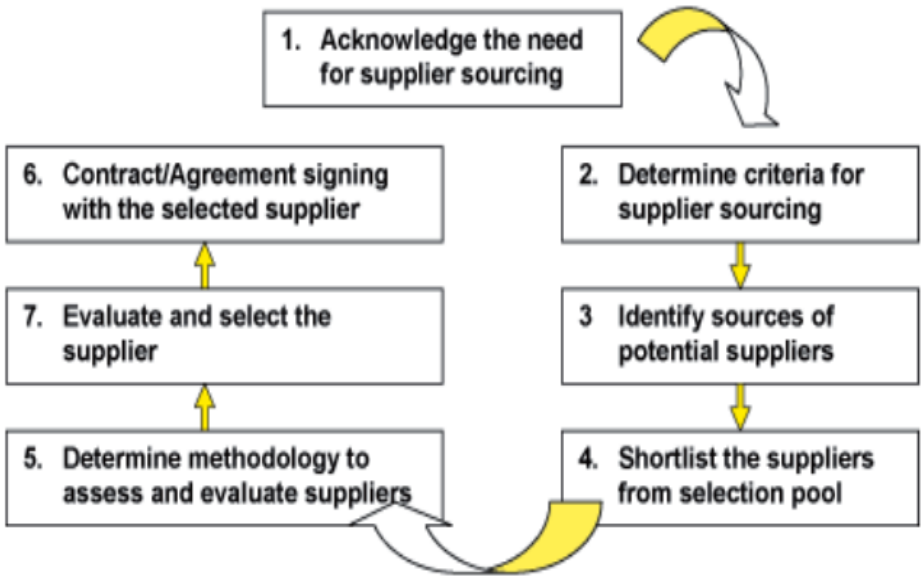


Figure: Supplier evaluation and selection process

There are some of the different criteria that an organization may use to assess potential suppliers.

Process and design capabilities*:*

- Suppliers should have up-to-date and **capable products, as well as process technologies** to produce the material needed.
- Because **different manufacturing and service processes have various strengths and weaknesses**, the buying organization must be aware of these characteristics upfront.
- When the buying organization expects suppliers to **perform component design and production**, it should also assess the supplier's design capability.
- One way to **reduce the time** required to **develop new products** is to use qualified suppliers that are able to perform product design activities.

Quality and reliability:

- Quality levels of the procurement item should be a very important factor in supplier selection.
- Product quality should consistently meet specified requirements as it can directly affect the quality of the finished goods.
- Besides this, reliability also refers to other supplier characteristics up to a certain time specification.

Cost:

- **Total cost of ownership** is an important factor.
- Total cost of ownership includes the unit price of the material, payment terms, cash discount, ordering cost, carrying cost, logistics costs, maintenance costs, and other more qualitative costs.

Service:

- Suppliers must be able to back up their products by providing good services when needed. For example, when product information or warranty service is needed, suppliers must respond on a timely basis.

Capacity:

- The organization may also need to consider whether the supplier has the capacity to fill orders to meet requirements and the ability to fill large orders if needed.

Location:

- **Geographical location** is another important factor in supplier selection, as it impacts delivery lead time, transportation, and logistics costs. Some organizations require their suppliers to be located within a certain distance from their facilities.

Management capability:

- Assessing a potential supplier's management capability is a complicated, but it is an important step. The different aspects of management capability include **management's commitment to continuous process and quality improvement.**

Financial condition and cost structure:

- An assessment of a **potential partner's financial condition** usually occurs during the evaluation process.
- Evaluation teams will typically evaluate the different **financial ratios** that determine whether a supplier can invest in resources and continue to meet its debt and financial obligations.
- These elements are important in determining whether the supplier will continue to be a reliable source of supply, and that supply will not be disrupted.

Planning and control system

- Planning and control systems include those systems that release, schedule and control the flow of work within an organization and also with outside parties.

Environmental regulation compliance:

- **The 1990s brought about a renewed awareness of the impact that industry has on the environment**. As a result, a supplier's ability to comply with environmental regulations is becoming an important criterion for supply chain alliances.

Willingness to share technologies and information*:*

- Suppliers can assist in new product design and development to ensure cost-effective design choices, develop alternative conceptual solutions, select the best components and technologies, and help in design assessment.
- By increasing the involvement of the supplier in the design process, the buyer is free to focus more attention on **core competencies.**

Longer-term relationship potential:

- Organization looks to develop a **long-term relationship** with a potential supplier.
- This approach requires that the parties will share their mutual goals, establish metrics to guide the relationship and develop a series of ongoing discussions on how issues and conflicts can be resolved in a mutually beneficial manner.
- These relationships may also involve **joint cost-savings projects** and **new product-development efforts.**

Supplier selection scorecards:

- During the selection stage, sometimes organizations need a **structured way to evaluate alternative suppliers.**
- A **supplier selection scorecard** may be used as a decision support tool. The evaluation team will assign a weight to the different categories and develop a numerical score for each supplier in each category, thereby developing a final performance score.

Solicitation of Bids and Proposals – Planning and Methods:

Solicitation:

- **Solicitation, in simple terms, is the process of requesting bids or proposals from potential suppliers.**

- Once the supplier research and market analysis is complete, and we have identified several suppliers that are well positioned in their markets and appear to have the qualifications, then we need the sourcing team can develop a **solicitation plan**.

- The plan should establish **the method to be used for the solicitation** and, when applicable, **the type of contract** is to be used.

- The process of notifying prospective or qualified bidders on the bid solicitor's wished to receive bids on the specified product or project.

- Solicitations include **invitation-to-bid (ITB), request for proposals (RFP), request for quotations (RFQ), and request for sealed bids**, which may be made public through advertising, mailings, or some other method of communication.

Solicitation Planning:

- To a large degree, the **solicitation plan** is driven by the nature of what is being acquired and the makeup of the supply base in the particular market in which we are sourcing.

- In the process of developing the plan, we must evaluate the **nature of the acquisition as a way of narrowing the sourcing possibilities.** We have to keep in mind that there are sourcing and procurement actions that fall outside the requirement for solicitation, such **as purchasing card transactions and spot or micro-purchases that may simply be "shopped" by the procurement group.**

How to Prepare a Solicitation:

The purchase of certain goods or services will require a formal procurement plan.

Solicitation is a phase of the procurement process in which the **business actively solicits offers from competing suppliers through an invitation to bid or request for proposals.** Solicitation documents identify the purchase, purchase requirements and outline a process each supplier must follow when submitting a formal bid or proposal.

1) Draft an informational letter of invitation.

- The letter provides key information potential suppliers need when determining whether they have an interest in **participating in the bidding process.**

- Use a formal voice, clearly define terms and provide thorough explanations and descriptions. Include submission deadlines, a brief description of the purchase need and instructions for preparing, structuring and submitting a bid.

- Provide details such as how long the bid must remain valid and describe the criteria and method the business will use when evaluating bid offers.

2) Create a schedule of requirements

- Create a schedule of requirements including quantities, clear technical specifications and product performance requirements.

- Make sure performance expectations are written tightly with no room for personal interpretation.

- This is vital to prevent later misunderstandings and disagreements during the contract execution phase of the purchase.

- Finally, include **delivery information, including the delivery date, mode of delivery transport and delivery terms.**

3) **Insert a sample contract**

- Insert a sample contract a copy of the authorized purchase order and sheets listing general and special terms and conditions.

- Terms can include items such as **insurance and bonding requirements** as well as non-performance and late performance penalty clauses. Sending a sample contract along with terms and conditions gives suppliers an opportunity to have the **contract reviewed by a legal professional prior to signing.**

4) **Include an offer submission form** as a final item in the solicitation. **The submission form becomes a legally binding document once the supplier signs and returns bid documents**.

Solicitation Methods:

The decision on solicitation process best effective for each procurement activity takes into consideration key parameters such as **price, techno-functional requirement and negotiation**. The different solicitation methods adopted by procurement professionals which are;

1) **Invitation for Bid (IFB)**
2) **Request for Proposal (RFP)**
3) **Request for Quotation (RFQ)**

Invitation for Bid (IFB):

- The procurement organization has a clear understanding of the material/service requirements vis-à-vis product/service specifications, quantity/duration, delivery method, etc.
- In such a case the primary consideration is on **price, and hence the contract/purchase order** will be awarded to the **lowest price bidder an IFB** is used.

Request for Proposal (RFP):

- The procurement organization adopts a different solicitation approach when it lacks the clarity and understanding required for satisfying the material/service requirement or when the requirement cannot be met with generally available standard products/services.

- An **RFP** is floated to identify the vendors that can provide **the products/services as per the material/service requirement.**

- RFP is not only a request for pricing, but it also seeks suggestions and ideas on how the product/service can be delivered.

- The response to RFPs can many a times voluminous because of the **uniqueness of the**

enquiry and the detailed response required meeting the material/service requirement.

- **RFP would involve negotiation of pricing** and other terms and conditions and so can be considered as part of **Negotiated Procurement.**

Request for Quotation (RFQ):

- A **request for quotation** (**RfQ**) is a business process in **which a company or public entity requests a quote from a supplier for the purchase of specific products or services**. RfQ generally means the same thing **as Call for bids (CfB) and Invitation for bid (IfB).**

- **Purchasing organizations** use RFQs when the consideration is not only price but other factors.

- RFQs are issued for small as well as large purchases where price is not the only consideration, but factors such as availability, delivery, payment terms, etc are also taken into consideration. This type of solicitation also helps in determining the current market price.

- RFQ would involve negotiation of pricing and other terms and conditions and so can be considered as part of Negotiated Procurement.

Contract Negotiation:

What Is Contract Negotiation?

- **Contract negotiations** are a process that involves discussing and compromising on contract terms in order to reach a final agreement between **two or more parties involved in a transaction.**

- In most contract negotiations, each party tries to negotiate for the best interest of themselves or their business.
- Contracts that are negotiable can include real estate leases, manufacturer warranties, employment contract, business deals, and financial contracts.

- The negotiation aspect of a transaction is very important because once the contract is final, all parties are legally bound to the terms of the contract terms and cannot overlook these terms without being liable.

What Is the Best Approach to Contract Negotiations?

In typical contract negotiations, each party involved in the contract must compromise on each in order to get what they really want out of the transaction. The best way to approach contract negotiations is the following:

Identify the objective for entering the contract*:* Every party to the contract must have a specific idea of what they want to gain from the transaction. Before attempting to negotiate a contract**, make a list of things we will compromise and a list of terms that we will not negotiate or give up.**

Research contract laws*:* Contracts are legally binding agreements, which are regulated by the courts. Before attempting to negotiate a deal, search online or get expert advice to determine whether the terms of the contract we are trying to form is legally allowed.

Prepare for negotiations*:* Gather all facts, figures, financial statements, and documents for the negotiation process in case we need to show proof of anything that you may need to **back up our negotiation points**.

Prepare a backup plan*:* Create a **plan for the possibility** that the contract fails to form and that both side cannot agree on the terms after negotiation.

List your priorities*:* It is important to know the difference between what we need out of the transaction and what we want.

Set a goal*:* We should know our bottom line so we can determine when to accept a deal and when to walk away.

Know the difference between what you need and what you want*:* Review our priorities and ask our self if the term that we are chasing for is worth negotiating.

Contract Negotiation Process:

When it comes to a contract negotiation process, the most difficult part may be to actually forget what you have been told about traditional negotiations processes, strategies & techniques. General negotiation will not work in this case.

Step 1 of Contract Negotiation

Process: Prepare, Prepare, Prepare.

This is the most important step of the whole **contract negotiation process.** Below are some other things that we need to prepare during this step: **Issue Identification, Issue Information, Classify the Issues, Prepare the meeting agenda, Get ready to Negotiate.**

Step 2 of Contract Negotiation Process:

Negotiation Meeting:

This is the meeting where we will sit down with the supplier. Important here is that this meeting most of the time is not called negotiation meeting – but any time you meet with a supplier to discuss their offer it means you are negotiating. So it is ultimately meeting for negotiation with supplier.

Step 3 of Contract Negotiation Process:

Summarize all points:

This is very important, as we need to get the other party's agreement to all the points that we discussed. You can simply divide this into two categories:

a) Points that we have already agreed; and
b) Points that we or the other side would need to get back to each other.

When Is There an Enforceable Contract?

- **Under contract law**, there is no enforceable contract until all of the material elements of the transaction have been negotiated and agreed upon by both sides. **All the contract terms and conditions** must be legal in order for them to be enforceable or that term or condition is void.

- If the parties have agreed to the terms of the deal and want to move forward with the **contract and legal details**, they can draft a contract that lists all the terms and both sign the **contract as the final agreement.**

- Under contract law, there is no contract until all of **the material elements of the deal have been negotiated and agreed upon**.

- If the parties have agreed to the business terms of the deal and want to proceed before hammering out the legal details, they can use **an escrow account or condition the release of funds** on the execution of a **written agreement.**

Vendor Performance Monitoring and Controlling:
Vendor Performance Monitoring:

The term 'suppliers' includes contractors for works and services as well as supplies
The term 'performance monitoring' means measuring a supplier's ability to comply with the benchmarks or targets fixed by organizations.

CIPS (CIPS - Leading global excellence in procurement and supply) recognizes the vendor performance monitoring and this is sometimes referred to as '**vendor rating'** especially where specific measures are used.

CIPS believes that performance monitoring is a fundamental element within contract management and supplier development. It can also be argued that monitoring the performance of suppliers can be;

i. **An aspect of supplier appraisal (i.e. the process of evaluating potential suppliers) and can be extended to supplier selection criteria during tendering**
ii. **An aspect of the management of approved supplier lists.**

There are many contractual relationships with suppliers where it is more important to agree **joint goals and jointly measure performance against these goals** - rather than the buyer simply monitoring the supplier's performance.

This requires transparency and a sharing, as appropriate, of business goals. **Relationship management** is part of the performance monitoring process. It is a key skill for the buyer and can be summarised as the proactive development of particular relationships with suppliers.

Assessment of Supplier Performance:

There are a number of key themes which might be used to **assess supplier performance** and which might be used as yardstick for determining whether good practice is being achieved in specific situations. Some examples of such themes (together with their sub-categories) are as follows:

- Product Quality
- MTBF (Mean Time Between Failure)
- Delivery accuracy
- Warranty
- Service Quality
- Call-out time
- Customer service response time
- Performance against agreed delivery lead times
- Relationship/Account Management
- Accessibility and responsiveness of account management
- Commercial
- Costs are maintained or reduced

Monitoring Performance of the Vendor :(vendor Management score card)

In the Vendor Management, one of the key performance criteria is a process to monitor the performance of the vendor. To do this, it is necessary to have a **vendor management scorecard**. Regardless of the size of the business, a vendor management scorecard should address the following criteria:

1) The scorecard should measure the **key performance indicators (KPI)** that the vendor is bound to. An easy way to develop this list is to use the **vendor's contract terms** as the list of measured items.

2) The scorecard should be easy to use by all employees. The scorecard should complete its definition of what should be measured, if it is not intuitive, nobody will use it which defeats the purpose of having a scorecard.
3) The scorecard should have a corresponding timeline and set of milestones that are in synchronicity with the performance indicators. Performance is a function of both times as well as quality. **The scorecard should be time, as well as quality performance based.**

4) The scorecard should not be a surprise that **a business suddenly decides to use with a vendor**. Ideally, the vendor has been made aware that their performance will be monitored and measured throughout the term of the contract. The measurement will be based **on consistent and regularly scheduled audits or evaluations** that are agreed to by both sides. This awareness should be created during the **contract negotiation phase of the vendor relationship.**

5) The data that is collected and analyzed by the scorecard should be used to follow up with the vendor.

Benefits of Vendor Performance Monitoring:

1) **Avoid supply chain risk and disruptions –** Vendor performance management provides in-depth visibility into the risk a supplier may pose so that we can put measures in place to reduce or eliminate that risk as it relates to our supply chain.

2) **Protect and improve brand/reputation –** A number of corporate brands have been tarnished by the actions of their suppliers. Vendor performance management can help us track supplier performance against these KPIs which will enable us to enact corrective actions early and keep our brand and reputation strong in the eyes of our customers and partners.

3) **Avoid costs and achieve savings –** There are variety of cost factors tracked using Vendor performance management which affects both hard and soft costs. Lack of timely and accurate vendor information can have huge impact on costs and can prevent us from capturing savings.

4) **Segment and rank vendors** –**Vendor performance management** is useful gives procurement groups' visibility into specific groups of suppliers and their overall ability to meet your organizations expectations and requirements.

5) **Collaborate with suppliers –** When we collaborate closely with suppliers we create new value for our business. The data collected through a vendor performance management solution can help to start these conversations because it provides the supplier with a view of what is important to our organization.

   The results are numerous: continuous improvement of the supply base, creation of realistic contracts based on past performance, more communication with suppliers, formation of common goals and the establishment of trust etc.

6) **Improve internal processes –** Creating a Vendor performance management process is a great step towards optimizing **our supplier management program**.

   By utilizing a technology-based solution for Vendor performance management, organizations can **achieve a standardized and automated approach for creating scorecards, issuing and tracking scorecards for completion, and in-depth reporting and analysis.**

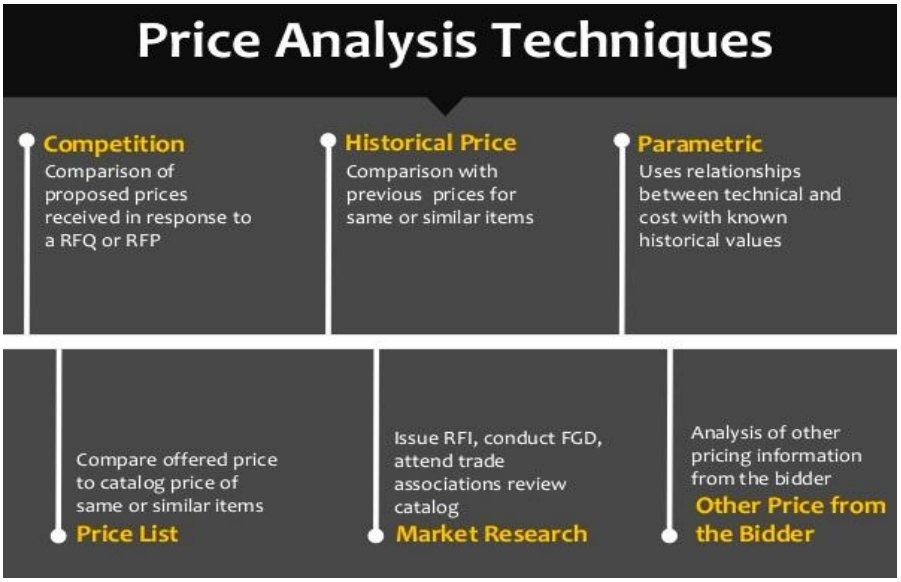
Module – III

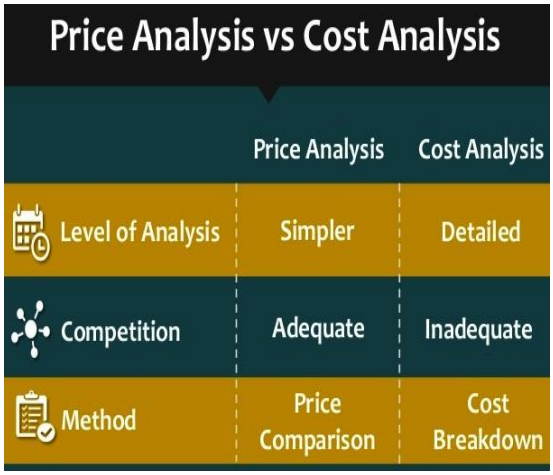
Analytical Tools in Sourcing

Pricing Analysis:

In general business**, price analysis is the process of examining and evaluating a proposed price without evaluating its separate cost elements and proposed profit**. The price analysis is dependent on the characteristics of the marketing system in place within a country.

Price analysis may also refer to the breakdown of a price to a unit figure, usually per square meter or square foot of accommodation or per hectare or square meter of land.



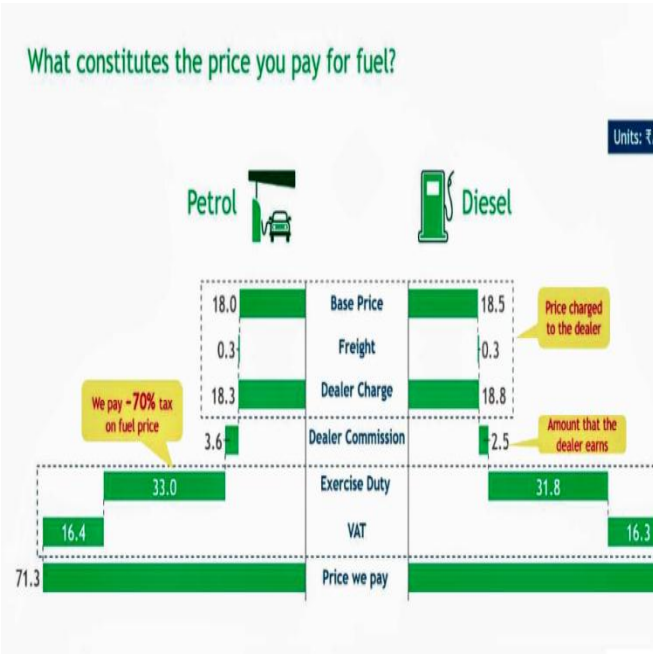


Cost Analysis- Cost analysis is defined thorough assessment of the direct and indirect costs leading to the final price of the goods or service. The Cost Analysis Philosophies includes;

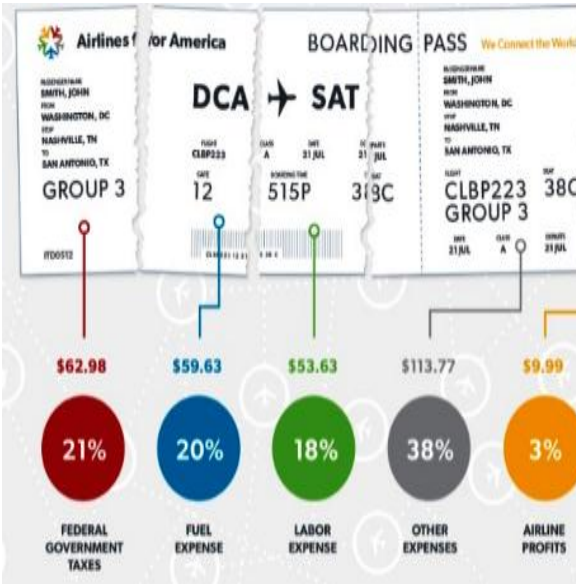
- **Reasonable for the goods or service**
- **Allocated proportionally to each cost component**
- **Allowed for the goods or service**

Figure: Common Cost Elements

Example of Pricing Analysis:



Pricing Analysis of Fuel cost in India



Pricing Analysis of Flight Cost in US

Analytical Tools in Sourcing:

Foreign Exchange Currency Management:

- **Exchange rate considerations are becoming an important facet of international sourcing.**

- Not only can volatile exchange rates impact the supplier selection decision, they can also affect the volume-timing of purchases once the supplier is selected.

- The best manufacturers have superior suppliers—(suppliers which save customers money, improve their quality, aid in design innovation, and reduce inventories). Global sourcing gives a new set of opportunities for the purchasing manager.

The Importance of Exchange Rates in International Sourcing:

- An exchange rate is the rate at which one currency will be exchanged for another. But in terms of operation it defines the exchange of resources. Exchange rates are determined in the **foreign exchange market**, which is open to a wide range of different types of buyers and sellers, and where currency and source trading are continuous.

1991 Economic reform in India for Exchange rate-

- Prior to the **1991 economic liberalization**, India was a closed economy due to the average tariffs exceeding 200 percent and the extensive quantitative restrictions on imports. Foreign investment was strictly restricted to only allow Indian ownership of businesses. Since the liberalization, India's economy has improved mainly due to increased foreign trade and exchange rate **(LPG MODEL-Liberalization, Globalization and Privatetization)**

Advantages:

- Trade equity in global world
- Equi-transformity in technology
- Proper balance in logistics
- Balanced utilization of resources
- **GDP balancing** and economy of scale will be maintained

Disadvantages:

- Cost crossing the limit
- Problem in Sourcing agency selection and source crashing
- Improper smoothening of logistics system
- Diversion in supply chain path
- Global risk in procurement and distribution process

Learning Curve :(Sourcing point of view)

Introduction:

In any environment if a person is assigned to do the same task, then after a period of time, there is an improvement in his performance.

If data points are collected over a period of time, the curve constructed on the graph will show a decrease in effort per unit for repetitive operations (as efficiency has already been improved over a period of time). This curve is very important in **cost analysis, cost estimation and efficiency studies. This curve is called the *learning curve*.**

The **learning curve theory** proposes that a learner's efficiency in a task improves over time the more the learner performs the task.

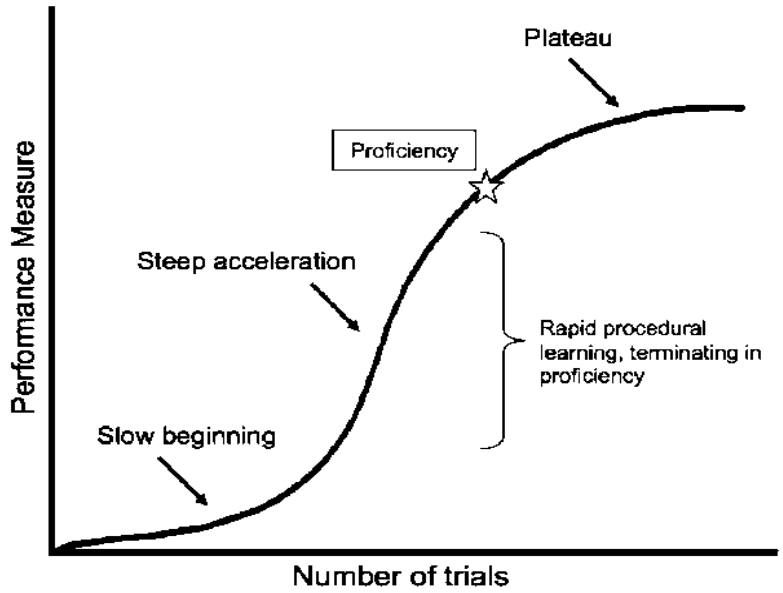


Figure: Learning Curve

The learning curve shows that if a task is performed over and over than less time will be required at each iteration. Historically, it has been reported that whenever there has been instanced of double production, the required labor time has decreased by 10 or 15 percent or more.

Learning curves are also known as or comprises of **experience curve, cost curves, efficiency curves and productivity curves**. These curves help to demonstrate the **cost per unit of output** decreases over time with the increase in **experience of the workforce (here work force is sourcing).** Learning curves and experience curves is extensively used by organization in **production planning, cost forecasting and setting delivery schedules.**

Learning Curve on Graph:

- Learning curve demonstrates that over a period time, there is an **increase in productivity** but with **diminishing rate as production increases.**

- Therefore, if the rate of reduction is **20% than the learning curve** is referred as 80% learning curve.

- Research has shown that as production quantities double over a period of time, the average time decreases by 20% for immediate production unit. Learning curve is relevant in taking following decision:

  - Pricing decision based on estimation of future costs.
  - **Workforce schedule** based on future requirements.
  - Capital requirement projections
  - Set-up of incentive structure

Learning Curve from Single Unit Data:

The data for effort put into production of a **single unit** is available than that data can be used to plot three useful curves; **the unit curve, the cumulative total and cumulative average curve.**

- **Unit curve** is a curve which is plotted using a set of data available for the effort behind production of a single unit. This curve is generally plotted on log-log paper and then best line can be drawn.

- **Cumulative total curve** is a curve which is plotted using cumulative effort total. This produces curve with positive slope.

- **Cumulative average curve** is a curve which is plotted using the cumulative effort average for each unit.

Assistance Score Learning Curve:

As the name suggests an assistance score is the **number of help, hint, wrong attempts** recorded for a given opportunity at the given task. From detailed research and analysis, it has been observed that for the 1st opportunity at an average error of 1.3 times is made.

Error Learning Curve:

Error learning curve depicts the percentage of assistance asked by the respondents on the 1st opportunity.

Predicted Learning Curve:

Predicted learning curve is derived from learning factor analysis, which has the capability in measuring supplier proficiency, knowledge component difficulty and knowledge component (sourcing knowledge) learning rates. This analysis helps in quantifying the learning process.

Criticisms of the Experience Curve:

- It has been observed that experience curve should not be viewed in isolation.
- Learning and experience curve has a strong dependency on individuals under observation. If the attitude of the individual is positive, the resulting curve will resemble learning curve but if the attitude of the individual is negative, the resulting curve will not hold good.
- Here attitude is effort. Effort of supplier is the attitude which is carried forward.

Application of the term "learning curve"

Two applications of the term "learning curve" can be found:

Generalized -The application of learning curve can be broad and generalized, such as describing the learning curve involved in learning to observe the pattern of effort of supplier. In these scenarios, a graphical representation using mathematics is not being applied to explain learning progression. The term is therefore used as a **qualitative description** of learning progression over time.

Measured- The other application of "learning curve" is quantitative, where mathematical models are created to represent the **rate of proficiency or efficiency (here efficiency is the supplier)**.This learning curve model is only applicable when used to measure the real rate of progress for completing a specific task against time. The task needs to be **repeatable, measurable, and consist of only one variable within a procedure**.

REAL WORLD EXAMPLES OF APPLICATION THE LEARNING CURVE THEORY

The learning curve is known by different names partly due to its wide variety of application.

Terms used to describe the learning curve include: **Experience curve, cost curves, efficiency curves, and Productivity curves.**

Industry

Supply costs as related to industry performance can be tracked by using the learning curve. The values could be **unit cost or unit supply hours and cumulative production in units.** As supplier supply with respect to time (meet required amount), the per-unit cost will often decrease.

Here **learning curve** can be used to predict potential supplier costs when production tasks change. For example, when the pricing of a new product is being determined, supplier costs are taken into account.

Quantity Discount Models:

To increase sales, many companies offer quantity discounts to their customers. **A quantity discount** is simply a decreased unit cost for an item when it is purchased in larger quantities. It is not uncommon to have a discount schedule with several discounts for large orders. See example below:

Discount Number	Discount Quantity	Discount	Discount Cost
1	0 to 999	0%	Rs.5.00
2	1000 to 1999	4%	Rs.4.80
3	2000 to over	5%	Rs.4.75

From the above Table, the normal cost for the item in this example is Rs.5. When 1,000 to 1,999 units are ordered at one time, the cost per unit drops to Rs.4.80, and when the quantity ordered at one time is 2,000 units or more, the cost is Rs.4.75 per unit. As always, management must decide when and how much to order. But with **quantity discounts**, how does a manager make these decisions?

As per the inventory models, the overall objective is to minimize the total cost. Because the unit cost for the third discount in above Table is lowest, it might be tempted to order 2,000 units or more to take advantage of this discount.

Placing an order for that many units, however, might not minimize the total inventory cost. **As the discount quantity goes up, the item cost goes down, but the carrying cost increases because the order sizes are large.** Thus, the major trade-off when considering **quantity discounts is between the reduced item cost and the increased carrying cost.**

In inventory model, we compute the total cost (including the total purchase cost) for **the EOQ model** as follows:

Total Annual Cost = Setup Cost + Holding Cost + Purchase Cost

$$= \frac{D}{Q}s + \frac{Q}{2}H + \mathbf{P\ x\ D}$$

4 Steps to Analyze Quantity Discount Models:

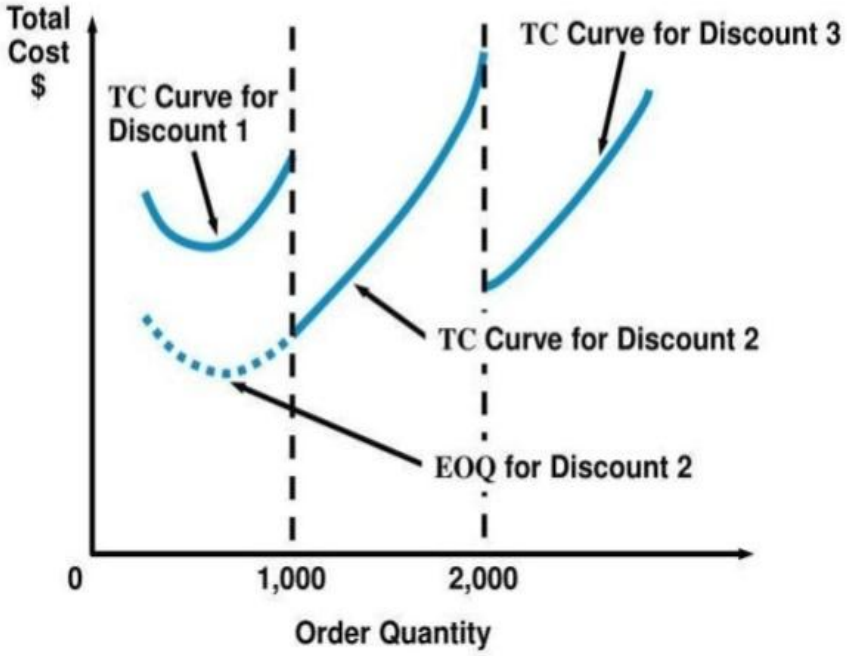
1. **For each discount price,** calculate a Q value, using the EOQ formula. In quantity discount EOQ models, the unit carrying cost, H, is typically expressed as a percentage (I) of the unit purchase cost (P). That is, H = I x P. As a result, the value of Q will be different for each discounted price.

2. **For any discount level,** if the Q computed in step 1 is too low to qualify for the discount, adjust Q upward to the lowest quantity that qualifies for the discount. For example, if Q for discount 2 in the

above Table turns out to be 500 units, adjust this value up to 1,000 units.

Quantity Discount Models

Total cost curve for the quantity discount model



- **The total cost curve** for the discounts shown in above figure is broken into three different curves. There are separate cost curves for the first ($0 \leq Q \leq 999$), second ($1,000 \leq Q \leq 1,999$), and third ($Q \geq 2,000$) discounts.

- Look at the total cost curve for discount 2. The Q for discount 2 is less than the allowable discount range of 1,000 to 1,999 units. However, the total cost at 1,000 units (which is the minimum quantity needed to get this discount) is still less than the lowest total cost for discount 1.

- Thus, step 2 is needed to ensure that we do not discard any discount level that may indeed produce the **minimum total cost**. Note that an order quantity compute in step 1 that is greater than the range that would qualify it for a discount may be discarded.

3. **Using the Total Cost Equation,** compute a total cost for every Q determined in steps 1 and 2. If a Q had to be adjusted upward because it was below the allowable quantity range, be sure to use the adjusted Q value.

4. **Select the Q that has the lowest total cost,** as computed in step 3. It will be the order quantity that

minimizes the total cost.

Quantity Discount Model Example:

Discount Number	Discount Quantity	Discount	Discount Cost
1	0 to 999	0%	Rs.5.00
2	1000 to 1999	4%	Rs.4.80
3	2000 to over	5%	Rs.4.75

GSB Department Store stocks toy cars. Recently, the store was given a quantity discount schedule for the cars, as shown in the above table. Thus, the normal cost for the cars is Rs.5.00. For orders between 1,000 and 1,999 units, the unit cost is Rs.4.80, and for orders of 2,000 or more units, the unit cost is Rs.4.75. Furthermore, the ordering cost is Rs.49 per order, the annual demand is 5,000 race cars, and the inventory carrying charge as a percentage of cost, I, is 20%, or 0.2. What order quantity will minimize the total cost?

D = 5,000 Units, S = Rs.49 per Order, I = 20% of Cost, **H = I x P (Cost)**

$$\mathbf{Q} = \sqrt{\frac{2DS}{H}}$$

Calculate Q for every discount

$$\mathbf{Q} = \sqrt{\frac{2DS}{IP}}$$

$$Q^1 = \sqrt{\frac{2(5000)(49)}{(0.2)(5.00)}} = 700 cars/order$$

$$\mathbf{Q}^2 = \sqrt{\frac{2(5000)(49)}{(0.2)(4.8)}} = 714\ cars/order$$

$$\mathbf{Q}^3 = \sqrt{\frac{2(5000)(49)}{(0.2)(4.75)}} = 718\ cars/order$$

In the GSB department store example, it was observed that the Q values for discounts 2 and 3 are too low to be eligible for the discounted prices. Therefore, adjusted upwards to 1000 and 2000 respectively.

With these adjusted Q values, is found that the lowest total cost of Rs.24, 725 results when it use an order quantity of 1000 units.

Q_1	$\sqrt{\frac{2(5000)(49)}{(0.2)(5.00)}}$	**=700 cars/order**	
Q_2	$\sqrt{\frac{2(5000)(49)}{(0.2)(4.8)}}$	**~~=714 cars/order~~**	**1,000-Adjusted**
Q_3	$\sqrt{\frac{2(5000)(49)}{(0.2)(4.75)}}$	**~~=718 cars/order~~**	**2,000-Adjusted**

Discount Number	**Unit Price**	**Order Quantity**	**Annual Product Cost**	**Annual Ordering Cost**	**Annual Holding Cost**	**Total Cost**
1	Rs.5	700	Rs.25,000	Rs.350.00	Rs.350	Rs.25,700.00
2	Rs.4.8	1000	Rs.24,000	Rs.245.00	Rs.480	**Rs.24,725.00**
3	Rs.4.75	2000	Rs.23,750	Rs.122.50	Rs.950	Rs.24,822.50
Choose the price and quantity that gives the lowest total cost **Buy 1000 units at Rs.4.80 per unit.**						

Integrative Pacific Systems Case:

Supplier Scorecard:

- A Supplier Scorecard is an evaluation tool used to assess the performance of suppliers. Supplier scorecards can be used to keep track of **item quality, delivery, and responsiveness of suppliers across long periods of time.** This data is typically used to help in purchasing decisions.
- A Supplier Scorecard is manually created for each supplier.
- The types of scorecards in use typically fall into one of three categories—**categorical, weighted point, or cost-based's performance across different categories.**
- As it relates to supplier scorecards, most supply chain organizations use a weighted point system that includes a **variety of performance categories, provides weights for each category, and defines the scales used for scoring within each category.**
- The third type, cost-based systems is used least. It attempts to quantify the total cost of doing business with a supplier over time.

Supplier Scorecard

[date]

Supplier Name:		**Overall Rating:**	3.00
Buying Category:			
Buyer Name:			

Area	Scorecard Criteria	Rating Scale for Expectations 1 = Below, 3 = Meets 5 = Exceeds	Comments	Area Weight	Area Rating	Wtd. Rating
Innovation	Management commitment and responsiveness	3	add comments here	25%	3.00	0.75
Application of creative ideas, best practices and technology that results in increased effectiveness for Buyer	Appropriate technical capabilities and skills	3	add comments here			
	Provides ideas that help buyer's organization achieve desired solutions	3	add comments here			
Quality	Demonstrated compliance with specifications and quality requirements	3	add comments here	20%	3.00	0.60
The compliance to buyer's specifications and industry standards	Committed to process performance and continuous improvement	3	add comments here			
	Maintains industry standard certifications for testing and audits	3	add comments here			
Support	Provides effective and timely communication regarding changes	3	add comments here	20%	3.00	0.60
Proactive supplier response to meet the needs for quality, service, cost and technical support	Responds to requests in a timely and effective manner	3	add comments here			
	Able to access expert resources to find best practice solutions	3	add comments here			
Delivery	On time delivery to meet scheduled materials or service requirements	3	add comments here	20%	3.00	0.60
The ability to meet delivery requirements. The ease of doing business to support supply chain needs.	needs (e.g. inventory and transportation)	3	add comments here			
	Utilizes effective systems to meet procure to pay needs	3	add comments here			
Cost / Contract	Goods or services are price competitive	3	add comments here	15%	3.00	0.45
Ability to provide total least cost solutions to buyer's organization	Cost reduction ideas are shared and resourced	3	add comments here			
	Price changes and contract terms are documented and transparent	3	add comments here			
				100%		3.00

Figure: Example of Scorecard

To access Supplier Scorecard, go to:

Before creating and using a Supplier Scorecard, it is advised that you create the following first:

Supplier: List of suppliers has to be found out

Scoring Setup: The **supplier scorecard** consists of a set evaluation periods, during which the performance of a supplier is evaluated.
This period can be weekly, monthly or yearly. The current score is calculated from the score of each evaluation period based on the weighting function.

Supplier Standings: The supplier standing is used to **quickly sort suppliers** based on their performance. These are customizable for each supplier. The scorecard standing of a supplier can also be used to restrict suppliers from being included in Request for Quotations.

Criteria Setup: A supplier can be evaluated on several individual evaluation criteria, including limited quotation response time, delivered item quality, and delivery timeliness. These criteria are weighed to determine **the final period score.**

Supplier Scorecard Variables: The value of each of these variables is calculated over the scoring period for each supplier. Examples of such variables include:

- The total number of items received from the supplier
- The total number of accepted items from the supplier
- The total number of rejected items from the supplier
- The total number of deliveries from the supplier
- The total amount received from a supplier

Evaluation Formulas: The evaluation formula uses the custom variables to evaluate an aspect of supplier performance over the scoring period.

Evaluating the Supplier: An evaluation is generated for each **Supplier Scorecard Period** which shows that the performance of the supplier over time. Any actions against the supplier are also noted here, including warnings when creating RFQs preventing these features for this supplier altogether.

How to create Supplier Scorecard :(practical way)

- Go to the Supplier Scorecard list, click on New.
- Select a Supplier to score.
- Select the evaluating period whether weekly, monthly, or yearly.
- Setup the scoring function.
- A supplier scorecard is created for each supplier individually. Only one supplier scorecard can be created for each supplier.

Sourcing Risk:

There are many sourcing risks associated with process of sourcing.

TYPE OF RISKS	ELEMENTS OF RISKS (RELATED TO SOURCING)
1. Time Risk	Lead time in procurement, delivery rate, time of order receiving, timing in action (action for delivery)
2. Financial Risk	Contract, bond, financial statement, Balanch

	sheet
3. **Supply/Operational Risk**	**Supply chain disruption, Logistics issues**
4. **Regulatory Risk**	**Organization control, Processing**
5. **Demand/Market Risk**	**Risk in raw material i.e demanded, direct benefit to consumer**
6. **Brand/Environmental Risks**	**Risk in pollution, hamper to human being**
7. **Intellectual Property Risk**	**Risk in Legislation act, bond etc.**

Risk Category	Examples
Capacity Risk	• Output variability / availability • Lead time variability
Catastrophic Risk	• Natural disasters • War & terrorism
Quality Risk	• Specification non-compliance
Financial Risk	• Foreign exchange rates • Vendor liquidity / viability
Management Risk	• Embezzlement • Fraud
Contractual Risk	• Intellectual property protection
Market Risk	• Increased competitiveness from global competitors

(RISK CATEGORY TABLE)

Elements used in analysis of sourcing Risks:

- Penetrate and Understand(understand the risks)
- Quantify
- Plan
- Syndicate
- Portfolio Management(portfolio of sourcing)

Five Easy Steps to Risk Management:

Risk Identification: Every risk needs to be identified. So Create a risk register to keep track of them.

Risk Analysis: Once identified, each risk is analyzed by scaling. This is usually graded on a **numerical scale.**

Risk Ranking: Using a risk matrix, give the risk an overall score by multiplying impact by likelihood. This will provide a way to rank all the risks and identify which are the most critical for your organization or project. Where scores are equal, you may choose to favor impact over likelihood (or vice versa) to rank one above the other.

Risk Mitigation: Make sure that you involve all key stakeholders in this and note roles and responsibilities in the event of these risks occurring.

Risk Monitoring: A Robust monitoring plan is key to making sure your register is up to date and everyone continues to know what to do.

Supplier Financial Analysis:

Financial analysis can showcase the stability of a supplier, helping to drive better Procurement decisions and mitigate business risk**. It also helps to avoid contracts with suppliers who might become bankrupt.** This makes financial analysis an essential element of any Procurement professional's tool kit.

But how do we conduct Supplier financial analysis?

Financial analysis is industry specific; so it is only useful when we benchmark suppliers from the same industry against each other. The financial health of a supplier is dependent on how the industry is doing, so benchmarking suppliers across industries will be productive. (Here benchmarking is related to **financial benchmarking).**

Financial analysis formulas:

The table below provides all the important ratios with formula for conducting financial analysis.

Profitability Ratios	
Ratio	Formula
Gross Profit Margin	Gross Profit / Sales
Operating Profit Margin	Operating Profit / Sales
Net Profit Margin	Net Profit / Sales
Return on Assets	Net Profit / Total Assets
Return on Equity	Net Profit / Shareholders Equity

Liquidity Ratios	
Ratio	Formula
Current Ratio	Current Assets / Current Liability
Quick Ratio	(Current Assets – Inventory) / Current Liability

Leverage Ratios	
Ratio	Formula
Debt-to-Equity Ratio	Total Liablity / Shareholders Equity

Activity / Efficiency Ratios	
Ratio	Formula
Inventory Turns	Cost of Goods Sold / Average Inventory
Days in Inventory	Average Inventory / (Cost of Goods Sold / Days)
Fixed Asset Turnover	Sales / Fixed Assets
Days Sales Outstanding	Ending Account Receivables / Sales / Days
Days Payables Outstanding	Ending Account Payable / Cost of Goods Sold / Days

Interpreting Financial Ratios:

Simply calculating financial ratios is not enough for financial analysis. It is also essential as procurement professional to be able to interpret them.

i. **Profitability Ratios:** These ratios help procurement professional understand if the supplier can generate sustainable revenue and control costs.

ii. **Gross Profit Margin*:*** If the ratio percentage is greater than zero, the supplier can make a product/service profitably. Gross profit margin is the difference between revenue and costs of the good divided by the revenue.

iii. **Operating Profit Margin*:*** This ratio provides information on a supplier's business from an operational perspective.

iv. **Net Profit Margin*:*** This ratio helps gauge supplier's capability to invest in new product development, research and Development, increase operating capacity, etc.

v. **Return on Assets*:*** How efficiently a supplier uses its assets to generate earnings.

vi. **Return on Equity*:*** This ratio calculates percent profit our supplier makes for every dollar of invested shareholder equity.

Electronic Sourcing:

E-Sourcing Definition:

- E-Sourcing refers to internet-enabled applications and decision support tools that facilitate interactions between buyers and suppliers through **the use of online negotiations, online auctions, reverse auctions and similar tools.**
- E-Sourcing is especially associated with **online auctions**, which enable prices reductions by introducing the element of competition. They are visible, clearly structured and make **the procurement process transparent.**
- E-sourcing referred to as electronic sourcing describes **the use of web-based systems** to collect and compare information about several suppliers in order to help the buyer select a preferred provider.
- The technology is designed to assist organizations **generate savings from their supply chains**, increase visibility of key business information and **reduce the amount of time** it takes for procurement professionals to do their day-to-day tasks.

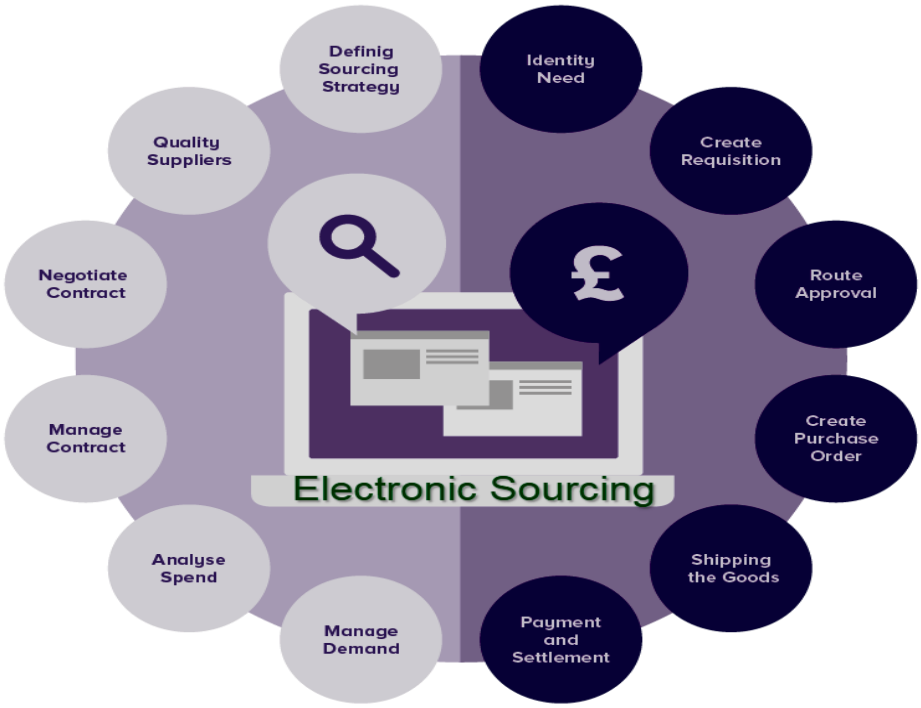


Figure: E-Sourcing

How does e-Sourcing work?

Electronic sourcing is a small but important part of the overall e-Procurement process. It involves everything from **inviting potential suppliers to tender, collecting supplier information, running tender processes and/or holding e-Auctions, analyzing and evaluating responses, and finally, awarding them with a contract.** The entire process is shown in the figure below;

Figure: Electronic Sourcing Process

Pre-purchase questionnaire:

- Before doing business with any supplier, it is imperative to identify if they're appropriate to do business with. Organizations achieve this with **pre-purchase questionnaires (PQQ),** which are detailed documents designed to assess the suitability of a supplier.

- PQQ's are common in the public sector, but in other industries the process can be called **Request for information (RFI).**

- In the past, procurement teams would have to manually fill out **these documents by hand or in software such as Microsoft Word or Excel**. With e-Sourcing, **the process is streamlined**, as suppliers can upload their **answers (answers of PPQ)** into the **e-Sourcing software, which is distributed directly to the business.**

- It allows organizations to collect information from more suppliers in a fraction of the time, and ensures consistency of completion.

Invitation to tender:

- **Invitation to tender (ITT)**, also known as **call for tenders**, is a process for generating competing offers from different suppliers. Once they have filled out a PQQ and have been selected to go to the next stage of the sourcing process, suppliers are sent with an ITT.

- The ITT document specifies all the requirements of the organization, including **what good or services are required, as well as outlining a range of information the buyer will require the supplier organization to submit about its own policies, practices and processes**, and how the evaluation process will be managed.

- Suppliers fill this document out to be taken to the next stage of the procurement process.

Request for quotation:

- This is a process where price, is the primary factor for choosing a supplier.
- Buyers send out forms for suppliers, asking all of them the prices of services they can render.
- **Request for quotations (RFQs)** can be used prior to a RFI and ITT **if a buyer is seeking to understand price ranges in the market.**

Evaluation:

- Once the requested evaluation formats have been sent and received, an evaluation process takes place, where the prospective **buyers evaluate whether the information they've been provided with makes them a viable supplier or not.**

- In the past, this process involved manually sorting through paperwork.

- But e-Sourcing changes this and provides a **sophisticated suite of analytics, dashboards and tools like automated scoring allowing users to automate elements** of the evaluation process, and therefore, save precious time.

E-Auction:

- Once suppliers have been selected, they are invited to participate in an e-Auction – a process where suppliers bid on the right to deliver the contract they've been invited to tender for.

- Many e-Sourcing tools **offer different e-Auction types,** each with unique benefits. Auctions are designed to encourage prospective suppliers to compete with one another and as such, deliver the best possible deal for procurement professionals.

Contract award:

- Once the tendering processes and/or e-Auctions have concluded, a contract is awarded to the winning supplier. **Elements of this process can be automated, automatically sending the winning bidder a contract.**

Benefits of e-Sourcing:

E-Sourcing provides businesses with a wealth of benefits and we've listed some of the most common below:

Reduces costs: By accessing a broader range of suppliers, and leveraging different e-Auction strategies, e-Sourcing presents significant cost savings for procurement teams.

Saves time and boosts efficiency*:* Electronic sourcing also speeds up the time it takes to award a contract. It does this by reducing the amount of time procurement specialists spend on the tendering process, and therefore, freeing up time to spend on other tasks.

Leverage detailed supplier information*:* e-Sourcing improves transparency between buyers and suppliers. A portal is typically used, where suppliers can see all tender opportunities from a supplier, with deadlines, status and other key information.

Bolster compliance: With all procurement-related documents stored in one place, auditing is made simpler, and therefore, so is compliance with regulatory procedures, with a system transparently showing how and why a supplier was selected.

Sustainability and Sourcing: (Sustainability of Sourcing):

What is Sustainable Sourcing?

- Sustainable Sourcing is the integration of social, ethical and environmental performance factors into the process of selecting suppliers.

- Companies must meet the growing expectations of stakeholders (including customers, shareholders, employees, NGOs, trade associations, labor unions, government observers, etc.) to take responsibility for their supplier's environmental, social and ethical practices.

- Thus, companies increasingly making responsible sourcing an integral part of their procurement and supply chain management processes to understand and manage these risks in the supply chain.

- The ultimate goal of **Sustainable Sourcing is to build strong, long-term relationships with suppliers. Improving performance in environmental, social and ethical issues** is becoming a major part of the overall process.

- Working toward this has become an extension of the company's commitment to **corporate responsibility** and as such becomes a part of the overall business structure and model.

Building a Business Case for Sustainable Procurement: The following steps are:

1: Develop and integrate into supplier selection process*:*

- Typically the procurement leadership develops a vision that aligns with company responsible business policy, and then adapts their procurement policies to include responsible business in the various **processes and criteria for supplier's selection and management.**

2: Set and communicate clear expectations for suppliers:

- When a company is engaging a supplier, a company must make it clear these new expectations that the suppliers must meet. This is usually codified in a code of conduct, as well as integrated into contracts, and supplier interaction.

3: Integration into buying practices:

- It is better to provide the vision, training and tools for buyers to **integrate Sustainable Sourcing** into their work and procurement decisions.
- This may include new software, training in CSR and responsible business, and a complete change management plan. Internal change management programs to convey to the corporate buyers.

4: Educate and support suppliers in setting their own business standards:

- As part of the process, companies should encourage their suppliers to develop responsible practices on their own.
- Educate suppliers on the business and **community benefits of practicing** responsible business:

- This may include **productivity, quality, community support and engagement, improved recruiting, employee turnover** and renewal of contracts. **Work collaboratively along with suppliers in structuring objectives** for their responsible business performance.

5: Ongoing monitoring of supplier CSR performance:

- Ongoing monitoring using **assessments and audits** are essential to maintain their supplier's environmental and social performance and practices.

- Using **multiple sources of data and input** from stakeholders is vital for having a balanced and thorough view of performance over time.

- Companies may be able to greatly **accelerate their program and save costs** by seeking out related initiatives in their industry sector, whereby they can partner with other companies within the same sector and develop **common approaches to assessing and monitoring suppliers**.

6: Manage stakeholder expectations and reporting on practices:

- **Transparency** is the final step to building and maintaining stakeholder trust. The program should produce **supplier performance information (related to community)** that can be adapted to include in an annual CSR reporting.

Moving forward:

Sustainable Sourcing is very vital if implemented well and to move forward, a company will need to:

1. Check whether prospective suppliers qualify for **independent certification of conformity** with recognized social and environmental standards.

2. Clearly define your expectations to your suppliers. Make clear that compliance with all applicable laws is a minimum criterion.

3. Explore potential risk areas with suppliers and agree on the desired level of performance. If necessary, use a **supplier code of conduct as a benchmark for compliance** and incorporate supplier requirements into commercial contracts.

4. Carry out assessments of suppliers' facilities and practices, including through independent monitoring where appropriate, or by organizing onsite visits and worker interviews.

5. Find out about sector wise (here sector is different functional department) initiatives which can help conduct assessments and provide information and training to suppliers on responsible business practices.

Green Sourcing:

What is Green Sourcing?

- **Green Sourcing** means the purchasing of products and services which take into consideration of the **environmental factors**.

- Green Sourcing specializes on **product sourcing and trading of eco-friendly and fair trade products**.

- Green sourcing means acquiring goods and services in the most **environmentally friendly** way possible. Local producers are greener sources because they ship their products over shorter distances. Both businesses and consumers support green sourcing when they purchase supplies produced locally.

Justification: Shipping products by truck, ship and plane becomes more expensive as oil and gasoline prices increase. Businesses and consumers also pay for the waste that packaging and shipping add to the cost of products. Green sourcing reduces these costs by **emphasizing local sources for products**.

Significance: Businesses and consumers who use green sourcing are more financially efficient, and they reduce society's overall need for fossil fuels. When local businesses receive more money, communities become stronger through adoption of new eco-friendly steps.

Benefits: Green sourcing is typically cheaper than traditional sourcing methods because shipping costs are lower for local products. Businesses that adopt **green sourcing** build a positive reputation in the community for environmental awareness while they reduce their costs.

Green Sourcing Process:

1-Assess Opportunity:

- Step one consists of understanding our spending in a given category (materials, logistics, maintenance costs, etc).
- The five most common areas to consider include: electricity and other energy costs; disposal and recycling; packaging; commodity substitution (alternative materials to replace other materials); and water (or other related resources).
- Once these costs are identified, they should be incorporated into the spend analysis project in this step.

2-Assess Internal Supply Chain:

- Step two consists of engaging internal supply chain stakeholders.
- Make sure to understand the business requirements, product specifications, and internal stakeholder perspectives in your supply chain(which is ecofriendly).

3-Assess Supply Market:

- Engage new and existing vendors in step three.
- Be sure to cite green opportunities and possible commodity substitutions and new manufacturing processes within a RFI (Request for Information).

4-Develop Sourcing Strategy:

- Step four is the most important because it depends on the quality of the information gathered in the RFI and will help determine the outcome, implementation, and continued success of the

sourcing process.

5-Implement the Sourcing Strategy:

- In step five, **bid analysis/evaluation quantifies cost** and benefits of sustainability attributes. Clearly identifying and **communicating the evaluation criteria** is essential to gaining support of diverse stakeholders in the green sourcing process.

6-Institutionalize the Sourcing Strategy:

- Sustainability attributes should be closely tracked and audited during this final step. Be sure to define metrics(measurable parameters are called metrics) for the supplier based on **performance, delivery, compliance, etc**. and consider both your organization's sustainability goals and the results of the sourcing process when setting these metrics.

Short essay on Sustainability and Green Sourcing through Procurement:

Green Sourcing has steadily become the buzzword in the corporate world. With increasing demands of having sustainable procurement owing to its implications in economic, social and environmental perspectives, more and more businesses are realizing the benefits of having a sustainable supply chain. Ideologically, green sourcing as a concept focuses on holistic development and benefits for all parties involved in the procurement process. Although there are some variations where businesses aim at their private profits and revenue growth, still the advantages of a sustainable supply chain can certainly be realized at various interdepartmental levels as well as across suppliers, vendors and companies.

Green Sourcing emphasizes the need to have standard practices of procurement that not only use avenues that are environment friendly but methods of procurement that transcend macroeconomics and corporate social responsibility. Green Sourcing through a sustainable supply chain has a plethora of benefits for the organizations as well as vendors. Every product in procurement needs a company's business goals, company policies and the decision making body to be in complete sync to be able to make the best choices of procurement. This is exactly where Green Sourcing changes the entire dynamics of procurement. Sustainability is of paramount significance in economics. With environmental benefits and convenience of using green sourcing for procurement, businesses have realized the potential rewards for all parties involved. There is still some time before green sourcing becomes a standard practice for businesses all across the globe. Presently, most businesses identify procurement and its requirement to have a sustainable supply chain as one of the most significant aspects in a company's modus operandi. Businesses are yet to completely switch over to green sourcing but there is a bright light at the end of the tunnel. Green sourcing not only promotes having a sustainable supply chain from the perspective of companies ordering the goods and products, but also for suppliers or vendors who themselves have a corporate social responsibility and a need to have optimum impacts on their business by driving revenue growth through sustainable procurement.

CASE STUDIES FOR DISCUSSIONS(CASE-1)

Case Study: ***This*** study explores the process of global sourcing through a case of the Swedish furnishing retailer IKEA from an interaction perspective. With a point of departure in the streams of existing research on global sourcing and the internationalization process of firms through networks, the research is concerning supply network interactions as an influence in the global sourcing process. The study focusing on IKEA and its development of a supply network for the PAX wardrobe system during the years 2003–2009.

The findings show that the global sourcing process is influenced by interactions and network effects between supply network actors. In particular, it finds that relationships between suppliers were identified and set up by IKEA, but cascaded into deeper interactions amongst suppliers at different supply network tiers. The global sourcing research in indicating the importance of interaction amongst supply network actors, showing how the global sourcing strategy of one actor may significantly influence the sourcing strategies of other actors. Global sourcing decisions therefore need to be understood and coordinated across global supply networks.

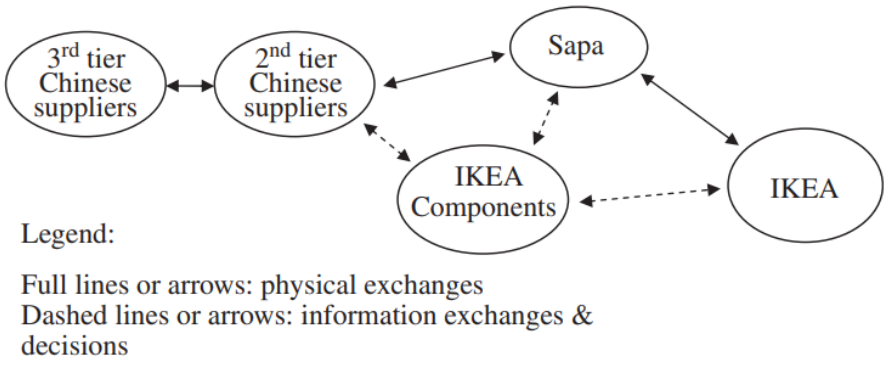


Figure: Interactions in the IKEA-Sapa sourcing process

IKEA's decision to develop global sourcing for the PAX wardrobe system was triggered by a need to secure availability, to cut costs and to develop new customer markets. Spurred on by IKEA, Sap subsequently initiated its search for international sources. Using an interaction perspective this can be seen as a domino effect or a process of creating 'waves on water', where IKEA 'influence on Sapa was an important ingredient in the process of the global supply network development concerning tempered glass for the PAX wardrobe system, but Sapa's increasing global operations also led their suppliers to redesign their supply network and interact in new ways across the global supply network. The IKEA case shows how global sourcing decisions have network-wide ramifications. Thus,

interactions amongst supply network actors, and the effects on the global sourcing process, were observed not only in the focal relationship, the relationship between IKEA and Sapa but also between the supply network and IKEA.

CASE-2

CASE STUDY: WHAT TOYOTA'S LATEST SUPPLY RISK EVENT TEACHES US

Toyota's supply chain is much revered for its lean Toyota Production System that it deploys internally and at its suppliers. It does help drive out waste and improve product quality. Yet it's "necessary but not sufficient" in running an end-to-end supply chain. Most recently, Toyota faced the threat of production line shutdowns in Japan due to a fire at an Aichi Corp. steel plant, which, given the incident occurred which, makes the potential shutdown all the more shocking to hear. Toyota was impacted by Takata-supplied air bags shooting steel shards into passengers upon deployment not good. And of course, the 2011 tsunami that prompted a major supply chain risk initiative to help the supply chain through reduced time to recovery (TTR) from months down to a few weeks.

Toyota defended its overall supply chain design regarding locally sourced materials, with the only cited exception being steel sourced from South Korea. In this most recent case, it'll be interesting to see how well alternative steel supply sources can be tapped in the short term.

Supply Risk Lessons, Courtesy of Toyota/Aichi:

Longer-term, there are some interesting and nuanced lessons to be gleaned from this latest problem:

Toyota learned about part dependencies the hard way back in 1997, when a fire at supplier Aisin Seiki knocked out supply of Toyota brake valves, leading to non-production of 70,000 Camry's. But, in this case, it wasn't just a tier 3 or tier 4 supplier; rather, the supplier was Toyota itself. (Aichi is a Toyota subsidiary.) And since Toyota, like Honda, also operates a trading arm to execute buy-sell arrangements with upstream suppliers, the supply chain network models truly look like networks rather than chains. Once you have an extended supply network model, then you can run much more supply network design scenarios beyond the usual analytics run by supply network design tools (aka where to put the warehouses and whatnot).

For example, just applying a Toyota resourcing 60/20/20 approach may offer some company level hedging, but if they're all in Japan, that wouldn't mitigate country-level risk (i.e., natural hazard risk to that country). In a supply risk mitigation program, you have to model your risk types broadly and robustly (e.g., scenario planning against those risks), before picking any one historical hedging approach. Toyota case, having alternate steel supplier sources that can support the steel requirements

met by Aichi will help get those sources ramped up to meet production volumes.

MODULE WISE MCQS QUESTIONS (SOURCING MANAGEMENT)

MODULE-1

Which type of function is best suited to being outsourced?

1. High operational performance, high strategic performance
2. High operational performance, low strategic performance
3. Low operational performance, low strategic performance
4. Low operational performance, high strategic performance

What is the terminology used whereby all associated costs of a procurement are taken into consideration?

1. Total cost of buying
2. Total cost of procurement
3. Total cost of purchasing
4. Total cost of ownership

A primary aim of procurement professional must be to achieve …

1. Value for money
2. Stock control
3. Inventory management
4. Outsourcing

Which of the elements inopportunity analysis of sourcing management is not suitable?

1. Determine how and with whom we are spending our funds
2. Identifypoorsupplierperformance
3. Reviewspendinghistorytofindmultipleitemsthatareverysimilarandcanberespecifiedtoasingleitem
4. All of these

Which of the following is a benefit to a business of having an efficient procurement department?

1. Improved levels of customer service
2. Increased levels of staff motivation
3. Higher sales revenue
4. Lower unit costs

Strategic alliances in sourcing management are a vital part. This statement is justified mostly by which statement-

1. Strategic alliances are one of the more common forms of formal collaboration.
2. They generally involve some manner of commitment to a long-term relationship between the parties.
3. Due to this, Cost is increased by enhancing quality
4. Any how to achieve competitiveness in market of either service or manufacture.

Which of the following would a new fair trade café consider as the most important factor when considering its choice of suppliers?

1. Price
2. Reliability
3. Flexibility
4. Ethical values

The business term that involves choosing a supplier, agreeing what to buy at a certain price and by when is called:

1. Logistics
2. Supply chain management
3. Stock control
4. Procurement

Choose the proper ordered sequence of sourcing process-

1. Strategic planning- Research. - Solicitation. - Contract administration
2. Research- Strategic planning- Contract administration-.- Solicitation
3. Contract administration- Research- Strategic planning- Solicitation
4. None of the above

Negotiation planning is considered to be the most important organ of sourcing management. Which of the statement is most suitably justifying the above statement-?

1. It is both collaborative and competitive.
2. Negotiation is a *process* of reaching agreement through discussion, analysis, and bargaining.
3. Both a and b
4. None of the above

What is the role of SMART indicator in negotiation strategy in sourcing?

1. It helps to enter a negotiation with the objective of "gaining a price reduction.
2. It optimizes the risk and no guarantee can be given
3. It is the boundary specific in sourcing and rigid in execution process
4. None of the above.

Supplier objective is taken into account for-

A. To recognize the supplier's objectives in order to better understand what you may be able to gain through an exchange of concessions.
B. You can determine what the supplier hopes to achieve during initial discussions and through analysis.
C. Cost addition and high loss tolerance

1. Both a and b
2. Both a, b and c
3. Both b and c
4. None of the above

SWOT Analysis in Negotiation is considered –

1. As you conduct the analysis, you might discover that your strengths rely on the competitive landscape
2. Forecasting the future
3. Only determine the futuristic risks
4. Holistic aspect of strength, weakness, opportunity and threat to business is determined.

Which of the following is a main reason why a supplier may be reluctant to supply a new business with stock?

1. The quality of the supplies may not meet customer expectations
2. The new business may request large volumes of stock
3. The new business may demand reasonable prices
4. High failure rate of new businesses

Why-Cross Cultural negotiation is the major challenge in sourcing?

1. As we develop our negotiation plan, we need to make adjustments according to the nature of the business and social culture in which the supplier is located.
2. What is most important universally is that we prepare our negotiation plan to reflect the in-depth research we have conducted. This will help us to better understand the critical factors in the culture in which we are going to operate
3. Both the options
4. None of these

Supplier performance evaluation follows some steps in which evaluation is conducted. Which of the following is not a component of the steps?

1. Establishing performance indicators
2. Practical Metrics for Supplier Performance Evaluation
3. Risk determination in whole supply system
4. Classification of suppliers

What is RFP (Request for proposal in sourcing)?

1. Response of the supplier with whom you intend to negotiate to other proposals you have received
2. Find gaps in this supplier's proposal
3. E-sourcing controlling
4. None of the above

Risk management is definite element to understand in sourcing management. Which statement is the most appropriate one to justify-?

1. It is only guiding consideration when selecting suppliers.
2. We consider risk as an evaluation factor in choosing between alternative courses of action
3. More and more stock keeping units
4. Disruption in sustainable procurement

Which of the following belongs to objective of global sourcing strategy-?

1. A specific amount of cost saving
2. An improvement in customer support through reduced lead times from suppliers and better on-time delivery performance
3. Development of new supplier alliances and partnerships
4. All of the above

Which one of the following is the most effective and acceptable methodology for risk management?

1. Delphi Technique
2. Historical Review
3. Simulation Process with decision science implementation
4. Decision for Variables in risk

a. What name is given to the purchase of components and services from the most appropriate suppliers
b. around the world regardless of location?
c. A.
d. International compartmentalisation
e. B.
f. Multidomestic marketing
g. C.
h. Global sourcing
i. D.
j. The
k. global–local
l. dilemma
m. What name is given to the purchase of components and services from the most appropriate suppliers
n. around the world regardless of location?
o. A.
p. International compartmentalisation
q. B.
r. Multidomestic marketing
s. C.
t. Global sourcing
u. D.
v. The
w. global–local
x. dilemma
y. What name is given to the purchase of components and services from the most appropriate suppliers

z. around the world regardless of location?
aa. A.
bb. International compartmentalisation
cc. B.
dd. Multidomestic marketing
ee. C.
ff. Global sourcing
gg. D.
hh. The
ii. global–local
jj. dilemma

What name is given to purchase of components and services from most appropriate supplier around the world regardless of location?

1. Global sourcing
2. Global location dilemma
3. International trading
4. Globalization

From a buyer's standpoint, which of the following is true?

1. Procurement planning should include consideration of potential subcontracts
2. Procurement planning does not include consideration of potential subcontracts since this is the duty of the contractor.
3. Subcontractors are first considered during the Solicitation Process
4. None of the above

What are the objectives of purchasing-

1. Maintain continuity in supply
2. Quality standard
3. Avoid duplication
4. All of the above

Which sourcing is in action if supply or technical risk is low and value or cost to your company is high?

1. Routine
2. Leverage
3. Critical
4. None of the above

What is the advantage of taking proactive approach to sourcing goods-?

1. Meet organization requirements
2. Negotiation
3. Equipped to global suppliers
4. All of the above

Which sourcing structure is generally appropriate when you need to use bottle neck or critical strategy?

1. Parallel structure
2. Multi sourcing model
3. Single sourcing structure
4. Delegate sourcing

Which method of purchasing is the most economical and involves more capital investment-

1. Hand to mouth
2. Bulk
3. Speculative
4. Blanket

Requisitions may be received by;

1. Catalog ordering
2. System generation ordering
3. Paper electronic purchase
4. All of the above

Which section of request of quotation provides background information such as information about purchasing organization?

1. Product or service scope
2. Introduction
3. Evaluation process
4. None of the above

Request for quotation is defined as;

1. Document that an organization submits to one or more potential suppliers eliciting quotations for a product or service.
2. Document of trade listing
3. Document of detailed procurement of material
4. Documentation of e- sourcing.

--------XXX------

MODULE - 2

Vendor rating is based on productivity of –

1. Price of raw material
2. Lead time of delivery
3. Quality assurance
4. All of the above

Which document invites supplier to submit quotation for goods-

1. Request for quotation
2. Request for information
3. Statement of work
4. Request for proposal

Which document can be used to solicit goods or services?

1. Request for proposal
2. Quotation
3. Statement of work
4. E-documentation

Advantage of multiple sourcing adoption-

1. Encourage competition
2. Organizational flexibility
3. Ease of supply chain system
4. All of the above

Decentralized sourcing creates-

1. Larger order in small space
2. Control in phase wise manner
3. Reduce administrative work
4. All of the above

Which factor affect the way you have chooses suppliers-?

1. Number of suppliers
2. Product uniqueness
3. Geographical position
4. All of the above.

Essential guideline for statement of work is-

1. Definitive in terms of standard
2. Being specific
3. Disproportion
4. Both a & b.

Which of the following is a Vendor Rating Technique?

1. Service cost ratio
2. Delphi method
3. Smoothening method
4. SPSS tool

Service cost ratio follows some steps. Which is a step for this method?

1. Listing the service factors like R&D, Labor stability, financial stability, flexibility in production for rush orders, etc.
2. Rating suppliers for each service factor.
3. Setting an acceptable norm e.g., out of a total of a 100 service points 70 may be an acceptable norm.
4. All of these.

Which is not a Supplier evaluation and selection criteria?

1. Supplier score card
2. Risk processing
3. Listing and historic data collection
4. None of the above

Measure of liquidity ratio determines --------- in sourcing

1. Indicate an organization's ability to meet short-term financial obligations.
2. The organization's ability to borrow funds to meet the shortfall in its current time horizon.
3. Both the options
4. None of the above

Inventory turnover ratio in sourcing determines-

1. The Inventory TurnoverRatiocalculateshowmany times a business's inventory turns over that is, is sold and replaced during the year.
2. Number indicates that inventory is moving quickly and being minimally stocked.
3. Both a and b
4. None of these

Supplier reputation is evaluated by

1. Reference check
2. Private agency
3. Government laws
4. Quality with reference.

Quality measuring methods are adopted for suppliers. Which of the followings is not a method for this measurement-?

1. Risk triggering and control
2. Six-sigma and ISO certification
3. Statistical tool and methods
4. Lean operations

What is the benefit of evaluating engineering expertise?

1. To examine and assess the technology used in its product or service development
2. How well the organization develops and deploys up-to-date, competitive products or services that will have the longest possible life span in our market
3. Both the choices
4. None of these

In value based supplier selection we follow-

1. A clearly documented set of evaluation criteria
2. Rigid Benchmarking
3. Both a and b
4. None of the above

Which is the most dominating factor for value based supplier-

1. Cost
2. Quality
3. Lead-time
4. Service process

Factor of supplier score cards is-

1. Finding requirements
2. Criteria
3. Weighted and lay outing of scorecard factors
4. All of the above

A stable supply chain is effected by-

1. Uncertain sourcing
2. Risks in procurement
3. Disruption in logistics
4. All of the above

What specifies the essential activities the vendor needs to complete?

1. Statement of work
2. Bidding
3. Request for proposal
4. Trade marking

Solicitation of bids is defined as-

1. The process of requesting bids or proposals from potential suppliers.
2. The process of rejecting proposal
3. Ultimate name of contract
4. None of the above

Request for proposal is-

1. Used as a means of preparing the way for the actual contract formation.
2. Used primarily to solicit proposals for services.
3. Both the options
4. None of the above

Request for RFP follows the sequence-

1. Introduction-requirement-attachment
2. Attachment-requirement-Introduction
3. Attachment-Introduction-requirement
4. None of the above

Solicitation follows some methods. The methods are:

1. Mailor Courier
2. Published Posting
3. Web-Based Portals
4. All of the above.

Crowd sourcing is defined as-

1. Crowd sourcing is a relatively new and increasingly popular avenue for sourcing and solicitation of relatively simple services
2. Crowd-sourcing works through posting a set of requirements on a specialized job board.
3. A mass Source process
4. a and b

Contract negotiations is defined as-

1. Contract negotiations are a process that involves discussing and compromising on contract terms in order to reach a final agreement between two or more parties involved in a transaction.
2. Contract negotiations are a process that involves discussing and compromising on contract terms in order to reach final agreement with only party.
3. More benefits with compromising loss
4. None of the above

Which of the following is a step for contract negotiation?

1. Prepare
2. Negotiation Meeting
3. Summaries all points of negotiation
4. All the above

Which of the following is a technique for controlling and monitoring of supplier performance?

1. Setting key performance indicators
2. Progress review meetings.
3. Regular procurer – supplier meetings
4. All of the above

Economic ordering quantity depends on right supplier. Which of the following cost factor justifies the statement?

1. Transaction cost
2. Holding and carrying cost
3. Failure cost
4. None of the above

Like roots of a tree, _____of organization is hidden from direct view in sourcing point of view.

1. Goodwill
2. Core competence
3. Higher management
4. Capital investment

MODULE-3

Learning curves represent the relationship between-

1. Average variable cost and the number of units produced per time period.
2. Average variable cost and the cumulative number of units produced.
3. Total cost and technology.
4. Average variable cost and the rate of increase in technology

A concept used to define learning curve in broader aspect-

1. Experience curve
2. Mixed curve
3. Fixed curve
4. Discrete curve

As compared to cumulative average time learning model , the learning model which predicts more cumulative total time to produce more units is known as-

1. Incremental unit time learning model
2. Price learning model
3. Incremental unit average model
4. None of these

The function which is used to measure decline in per unit cost of different business functions are classified as-

1. Mixed curve
2. Fixed curve
3. Experience curve
4. None of the above.

Learning curve is beneficial for

1. These curves help demonstrate the cost per unit of output decreases over time with the increase in experience of the workforce
2. Enhance –process efficiency
3. Satisfies futuristic requirements
4. All of these.

Match the box-

Learning curves	**Utility**
A. **Assistance Score Learning Curve**	1. The number of help, hint, and wrong attempts recorded for a given opportunity at the given task.
B. **Error Learning Curve**	2. Depicts the percentage of assistance asked by the respondents on the 1st opportunity and eliminates error.
C. **Predicted Learning Curve**	3. Capability in measuring student proficiency, knowledge component difficulty and knowledge component learning rates.

1. A-1, B-2, C-3
2. A-2, B-3, C-1
3. A-3, B-1, C-2
4. A-3, B-2, C-1

Why economy of scale concept is adopted for economic discount quantity model?

1. More quantity, high inventory loss, high cost
2. More quantity, less inventory loss, less cost
3. More quantity, high inventory loss, high cost
4. None of these

Which is correct regarding EOQ Model?

1. Feasible total cost (holding+ carrying) decreases from top value to bottom
2. Holding cost increases with respect to quantity
3. Carrying cost is to be fluctuated by nature for stabilization
4. All of the above

Total cost in Discount quantity model is-

1. Carrying cost +Holding Cost +Inventory cost
2. Carrying cost +Holding cost
3. None of these
4. Both a and b

Economic ordering quantity (EOQ) is defined by which formula-(Sqrt= Square root, D=Quantity demanded, S= Carrying cost, H=Holding cost)

1. Sqrt(2*D*S/H)
2. Sqrt(2*H/D)
3. Sqrt(2*S/H)
4. None of the above

What is the advantage of E-sourcing?

1. **More competitive supplier quotations**
2. **Transparency in the purchasing process**
3. **Better competitive intelligence**
4. **Reduce cost**

1. 1, 2
2. 1,2,3,4
3. 1, 2, 3
4. 1, 4

Chose the correct steps for achieving sustainable sourcing?

1. **Develop and integrate into supplier selection process**
2. **Set and communicate clear expectations for suppliers**
3. **Integration into buying practices**
4. **Educate and support suppliers in setting their own business standards**
5. **Ongoing monitoring of supplier CSR performance**
6. **Manage stakeholder expectations and reporting on practices**

1. 1-2-3-4-5-6
2. 1-3-5-4-2-6
3. 1-2-3-5-4-6
4. None of these

Risk management in sourcing follow a step wise pattern. Choose the right step sequence-

1. Identification----analysis----mitigation----monitoring
2. Identification----mitigation----analysis-----monitoring
3. Mitigation---- monitoring------ identification-----analysis
4. None of the above

Negotiated contract with typical supplier with long term relationship is defined as-

1. Systematic sourcing
2. E-sourcing
3. Both the above
4. None of the above

The concepts of the three Ps of sustainability are in sourcing-

1. Environment, Etiquette, Economy
2. People, Planet, Profit
3. People, Procurement, Profit
4. Process, Profit, Production

Why are companies looking to have a green and sustainable sourcing chain?

1. For sustainability for future generations
2. For potential customers
3. Minimizing loss with optimize the resource
4. All of the above

One of the advantages of green sourcing is-

1. Environmental standards meeting
2. Social Sustainability
3. Risk factor mitigation in processing
4. None of the above

The order cost per order of an inventory is Rs. 400 with an annual carrying cost of Rs. 10 per unit. The Economic Order Quantity (EOQ) for an annual demand of 2000 units is

1. 400
2. 440
3. 480
4. 500

What is the objective of the economic order quantity (EOQ) model for inventory?

1. To minimize order costs or carrying costs, whichever are higher?
2. To minimize order costs or carrying costs and maximize the rate of inventory turnover.
3. To minimize the total cost, order costs and carrying costs over a period of time.
4. To order sufficient quantity to economically meet the next period's demand

Supplier financial analysis for procurement is defined by the factor-

1. Industry specific key performance indicators
2. Asset and liability study
3. Risk contingency fund management
4. Both a and b

The cost of insurance and taxes are included in

1. Cost of ordering
2. Set up cost
3. Inventory holding cost
4. Cost of shortages

Which of the following is true for Inventory control in sourcing?

1. Economic order quantity has minimum total cost per order
2. Inventory carrying costs become constant with quantity per order
3. Ordering cost increases with lo size
4. All of the above

The importance of exchange rate in international sourcing is-

1. Trade equity
2. Sourcing agency selection
3. Equi-potential utilization of resource
4. Only a and c

Which of the following is not an inventory in sourcing?

1. Machines
2. Raw material
3. Finished products
4. Consumable tools

The following classes of costs are usually involved in inventory sourcing decisions except

1. Cost of ordering
2. Carrying cost
3. Cost of shortages
4. Machining cost

Which of the following factor is given emphasized on supplier financial analysis?

1. Inventory ratio
2. Net cost benefit analysis
3. Quick ratio
4. All of the above

Client dealing with controlling procurement from supplier with monitoring by ERP embedded system is an application of-

1. E-sourcing
2. Physical Material Requirement plan
3. Control Boundary
4. None of these

Reverse logistic suppliers generates economy of-

1. Circular
2. Rectangular
3. Square
4. None of the above

Choose the right sequence of preparing supplier score card?

1. Go to the Supplier Scorecard list-------- Select a Supplier to score------- Setup the scoring function---------- A supplier scorecard is created for each supplier individually
2. Go to the Supplier Scorecard list------- A supplier scorecard is created for each supplier individually---------- Setup the scoring function-------- Select a Supplier to score
3. None of the above
4. Setup the scoring function------ Select a Supplier to score------- Go to the Supplier Scorecard list.

ABC analysis is important raw material procurement. Why?

1. Follows 80/20 rule
2. Quality by superiority and inferiority level
3. Ease in Decision by quality circle
4. All of the above

PROBABLE QUESTIONS (MODULE WISE) OF SOURCING MANAGEMENT (BPUT PATTERN)

MODULE1 QUESTION (2 MARKS)

1. What is global sourcing?
2. Define strategic sourcing.
3. Define opportunity analysis in sourcing.
4. Gap analysis in sourcing
5. Define strategic alliance
6. What is joint venture in sourcing?
7. What is Business Process outsourcing?
8. What is the concept of co-sourcing in Sourcing management?
9. Why do we follow negotiation in sourcing management?
10. What is Request for Proposal in negotiation Strategy?
11. What is cross-cultural negotiation?
12. What is supplier performance evaluation?
13. Why do risk analysis is important in sourcing management?
14. What is risk triggering?
15. What is contingency plan in sourcing management?
16. What is risk management technique in international business?

MODULE 2-QUESTION (2 MARKS)

1. Why do we do vendor rating in sourcing management?
2. Highlight some rating plans of vendor in sourcing management
3. What is cost ratio method in vendor rating?
4. What is inventory turnover ratio?
5. What is receivable turnover ratio?
6. Why do we consider quality management process in sourcing management?
7. What is value based factors in sourcing planning and highlight with some examples
8. What is supplier score card?
9. What is contract negotiation process?
10. What is request for proposal?
11. What is solicitation method?
12. What is crowd sourcing?
13. Why do we prefer vendor monitoring and controlling?
14. Mention some tools of performance monitoring in sourcing management.

MODULE 3 QUESTIONS (2 MARKS)

1. What is green sourcing?
2. What is sustainable sourcing?
3. What is E-sourcing?
4. What is learning curve? How does it help in sourcing?
5. What are the advantages and disadvantages of quantity discount model.
6. What is sourcing sustainability
7. What do you mean by foreign exchange currency management?
8. How does foreign exchange currency management help in procurement and sourcing?
9. Discuss advantages and disadvantages of foreign exchange currency in brief
10. What is EOQ?
11. How EOQ can be a quantity discount model?
12. What is sourcing risk?

LONG QUESTIONS-((MODULE1) PROBABLE 16 MARKS)

1. Strategic sourcing is the major key to maximize value based productive system. Illustrate with suitable example.
2. What is Strategic sourcing planning? Explain in details.
3. What is Opportunity analysis in sourcing? Illustrate in details.
4. Global operational sourcing strategy is the major interconnectivity in operation field. Explain with example.
5. What is sourcing risk? Explain steps for its mitigation.
6. What is negotiation in sourcing? Why it is important? Explain its nature with planning strategy.
7. Explain in steps with negotiation strategy development.
8. What is supplier performance evaluation? Why? Explain in detailed processing steps.
9. Managing international business sourcing is a challenge in operational prospective. Is it true? Illustrate your answer with suitable justification.
10. What is risk in international sourcing? Illustrate detailed methods for international business management.
11. Supply chain management is directly proportional to sourcing management. Illustrate.
12. What are the roles that outsourcing and procurement play in the supply chain? Explain the risks and benefits of outsourcing.
13. What is negotiation? Explain the various negotiation strategies and persuasion techniques.

MODULE 2

1. Vendor rating is essential for cost cutting process of sourcing. Are you agreeing on it? Illustrate with detailed explanation.
2. What is self certified vendor management? Why it is? Explain with detailed steps. Explain also factors responsible for it.
3. Explain methodologies for major vendor rating plan. In details.
4. Supplier evaluation and selection are the major ingredients for cost saving and effective
5. What is quality performance? Explain in details
6. What is value based supplier selection? Why it is important?
7. Explain Supplier score card method in details.
8. Explain contract negotiation in details with examples.
9. Elucidate solicitation and bid selection process in sourcing in details. Also explain solicitation methods in details.
10. What is contract negotiation? Explain with detailed process.

MODULE 3

1. What is learning curve and explain its utilization in sourcing.
2. What is quantity discount model?

Example

Demand for a product is 25 tones / day and there are 200 working days / year. ==> D = 25(200) = 5000.
Ordering cost is $48 / order ==> S = 48
Carrying cost is $2 / unit / year ==> H = 2
Price schedule is as follows:

Quantity (Q)	Price (P)
600-...	8
400-599	9
0-399	10

What is the best quantity that we could order to minimize our total annual cost?

Solve this. (Numerical)

3. Discuss the advantages and disadvantages of E Sourcing in details.
4. Sustainability in sourcing is the need of hour. Elucidate
5. What is integrative pacific systems in sourcing and explain its components elaboratively.
6. Explain sourcing risks and its mitigation strategy
7. Why do we have to do Supplier financial analysis?
8. Green sourcing is the environmental sustainable concept. Why do corporate now a day's mandate this?
9. Is there any linkage between foreign exchange management and sourcing? if yes then justify with good illustration
10. Explain supplier score card system in details.