# ASSIGNMENTS

1. **Describe how purchasing become aware of purchase requirements**.

**purchasing and procurement**

Purchasing and procurement is used to denote the function of and the responsibility for procuring materials, supplies, and services. Recently, the term "supply management" has increasingly come to describe this process as it pertains to a professional capacity. Employees who serve in this function are known as buyers, purchasing agents, or supply managers. Depending on the size of the organization, buyers may further be ranked as senior buyers or junior buyers.

**HISTORY**

Prior to 1900, there were few separate and distinct purchasing departments in U.S. business. Most pre-twentieth-century purchasing departments existed in the railroad industry. The first book specifically addressing institutionalized purchasing within this industry was *The Handling of Railway Supplies—Their Purchase and Disposition,*written by Marshall M. Kirkman in 1887.

Early in the twentieth century, several books on purchasing were published, while discussion of purchasing practices and concerns were tailored to specific industries in technical trade publications. The year 1915 saw the founding of The National Association of Purchasing Agents. This organization eventually became known as the National Association of Purchasing Management (NAPM) and is still active today under the name The Institute for Supply Management (ISM).

Harvard University offered a course in purchasing as early as 1917. Purchasing as an academic discipline was furthered with the printing of the first college textbook on the subject, authored by Howard T. Lewis of Harvard, in 1933.

Early buyers were responsible for ensuring a reasonable purchase price and maintaining operations (avoiding shutdowns due to stockouts). Both World Wars brought more attention to the profession due to the shortage of materials and the alterations in the market. Still, up until the 1960s, purchasing agents were basically order-placing clerical personnel serving in a staff-support position.

In the late 1960s and early 1970s, purchasing personnel became more integrated with a materials system. As materials became a part of strategic planning, the importance of the purchasing department increased.

In the 1970s the oil embargo and the shortage of almost all basic raw materials brought much of business world's focus to the purchasing arena. The advent of just-in-time purchasing techniques in the 1980s, with its emphasis on inventory control and supplier quality, quantity, timing, and dependability, made purchasing a cornerstone of competitive strategy.

By the 1990s the term "supply chain management" had replaced the terms "purchasing," "transportation," and "operations," and purchasing had assumed a position in organizational development and management. In other words, purchasing had become responsible for acquiring the right materials, services, and technology from the right source, at the right time, in the right quantity.

Only in small firms is purchasing still viewed as a clerical position. When one notes that, on average, purchasing accounts for over half of most organizations' total monetary expenditures, it is no wonder that purchasing is marked as an increasingly pivotal position.

**FACTORS FOR PURCHASING**

The importance of purchasing in any firm is largely determined the four factors: availability of materials, absolute dollar volume of purchases, percent of product cost represented by materials, and the types of materials purchased. Purchasing must concern itself with whether or not the materials used by the firm are readily available in a competitive market or whether some are bought in volatile markets that are subject to shortages and price instability. If the latter condition prevails, creative analysis by top-level purchasing professionals is required.

If a firm spends a large percentage of its available capital on materials, the sheer magnitude of expense means that efficient purchasing can produce a significant savings. Even small unit savings add up quickly when purchased in large volumes. When a firm's materials costs are 40 percent or more of its product cost (or its total operating budget), small reductions in material costs can increase profit margins significantly. In this situation, efficient purchasing and purchasing management again can make or break a business.

Perhaps the most important of the four factors is the amount of control purchasing and supply personnel actually have over materials availability, quality, costs, and services. Large companies tend to use a wide range of materials, yielding a greater chance that price and service arrangements can be influenced significantly by creative purchasing performance. Some firms, on the other hand, use a fairly small number of standard production and supply materials, from which even the most seasoned purchasing personnel produce little profit, despite creative management, pricing, and supplier selection activities. **THE ROLE OF PURCHASING**

There are two basic types of purchasing: purchasing for resale and purchasing for consumption or transformation. The former is generally associated with retailers and wholesalers. The latter is defined as industrial purchasing.

Purchasing can also be seen as either strategic or transactional. Also, the words "direct" and "indirect" have been used to distinguish the two types. Strategic (direct) buying involves the establishment of mutually beneficial long-term relationship relationships between buyers and suppliers. Usually strategic buying involves purchase of materials that are crucial to the support of the firm's distinctive competence. This could include raw material and components normally used in the production process. Transactional (indirect) buying involves repetitive purchases, from the same vendor, probably through a blanket purchase order. These orders could include products and services not listed on the bill of materials, such as MRO goods, but are used indirectly in producing the item.

Some experts relate that the purchasing function is responsible for determining the organization's requirements, selecting an optimal source of supply, ensuring a fair and reasonable price (for both the purchasing organization and the supplier), and establishing and maintaining mutually beneficial relationships with the most desirable suppliers. In other words, purchasing departments determine what to buy, where to buy it, how much to pay, and ensure its availability by managing the contract and maintaining strong relationships with suppliers.

In more specific terms, today's purchasing departments are responsible for:

* coordinating purchase needs with user departments
* identifying potential suppliers
* conducting market studies for material purchases
* proposal analysis
* supplier selection
* issuing purchase orders
* meeting with sales representatives
* negotiating
* contract administration
* resolving purchasing-related problems
* maintenance of purchasing records

These functions obviously entail no insignificant amount of responsibility.

As the role of purchasing grows in importance, purchasing departments are being charged with even more responsibilities. Newer responsibilities for purchasing personnel, in addition to all purchasing functions, include participation in the development of material and service requirements and related specifications, conducting material and value-analysis studies, inbound transportation, and even management of recovery activities such as surplus and scrap salvage, as well as its implications for environmental management.

In the 1970s and 1980s purchasing fell under the rubric of "materials management." Many corporations and individual facilities employed executives who held the title "materials manager," responsible for purchasing and supply management, inventory management, receiving, stores, warehousing, materials handling, production planning, scheduling and control, and traffic/transportation. Today, the term materials management has expanded to include all activities from raw material procurement to final delivery to the customer, to management of returns; hence, the newer title supply chain management.

As purchasing personnel became even more central to the firm's operations, they became known as "supply managers." As supply managers, they are active in the strategic-planning process, including such activities as securing partnering arrangements and strategic alliances with suppliers; identification of threats and opportunities in the supply environment; strategic, long-term acquisition plans; and monitoring continuous improvement in the supply chain.

A study by found that strategic purchasing enables firms to foster close working relationships with a limited number of suppliers, promotes open communication among supply chain partners, and develops a long-term strategic relationship orientation for achievement of mutual goals. This implies that strategic purchasing plays a synergistic role in fostering value-enhancing relationships and knowledge exchange between the firm and its suppliers, thereby creating value. In addition, supply managers are heavily involved in cross-functional teams charged with determining supplier qualification and selection, as well ensuring early supplier involvement in product design and specification development.

A comprehensive list of objectives for purchasing and supply management personnel would include:

* to support the firm's operations with an uninterrupted flow of materials and services:
* to buy competitively and wisely (achieve the best combination of price, quality and service);
* to minimize inventory investment and loss;
* to develop reliable and effective supply sources;
* to develop and maintain healthy relations with active suppliers and the supplier community;
* to achieve maximum integration with other departments, while achieving and maintaining effective working relationships with them;
* to take advantage of standardization and simplification;
* to keep up with market trends;
* to train, develop and motivate professionally competent personnel;
* to avoid duplication, waste, and obsolescence;
* to analyze and report on long-range availability and costs of major purchased items;
* to continually search for new and alternative ideas, products, and materials to improve efficiency and profitability; and
* to administer the purchasing and supply management function proactively, ethically, and efficiently.

**DETERMINING REQUIREMENTS**

In progressive firms, purchasing has a hand in new product development. As a part of a product development team, purchasing representatives have the opportunity to help determine the optimal materials to be used in a new product, propose alternative or substitute materials, and assist in making the final decision based on cost and material availability. Purchasing representatives may also participate in a make-or-buy analysis at this point. The design stage is the point at which the vast majority of the cost of making an item can be reduced or controlled.

Whether or not purchasing had an impact on a product's design, the purchasing agent's input may certainly be needed when defining the materials-purchase specifications. Specifications are detailed explanations of what the firm intends to buy in order to get its product to market.

Generally specified is the product itself, the material from which it is to be made, the process for making it, minimum levels of quality, tolerances (a range in which a specified characteristic is acceptable, e.g., an outer diameter must be a certain size, ±25 millimeters), inspection and test standards, and a specific function the product must perform.

If the product requires a standardized component, the specifications are easily communicated by specifying a trade or brand name. However, a custom part can complicate the situation considerably; if incorrectly manufactured, such a product can severely damage a relationship, resulting in unnecessary costs and possible legal action. It is the buyer's responsibility to adequately communicate the specifications to the supplier so that there is no misunderstanding

**SUPPLY SOURCING**

Part of the sourcing decision involves determining whether to purchase apart from an outside supplier or produce the part internally. This is typically known as a make-or-buy decision. If the buyer chooses to purchase the part externally, then he must find qualified suppliers who are willing to make and sell the product to his or her firm under the specified conditions.

Buyers have a number of places to go to locate sources of supply, some obvious and some indirect. The most obvious sources would include the Yellow

Pages, other purchasing departments, and direct marketing. Purchasing departments typically have a number of trade publications to which they subscribe, such as *Purchasing, Iron Age,*and *Purchasing World,*which are filled with advertisements for a multitude of suppliers. Also, being a subscriber usually puts the buyer's name on a mailing list so that flyers, postcards, and other varieties of direct marketing find their way into the purchasing department's hands.

Other sources of supply include manufacturer directories and trade registers. The best known of these is *Thomas' Register of American Manufacturers,*frequently referred to simply as the *Thomas Register.*With 125,000 trade and brand names, 151,000 U.S. and Canadian company listings, and 6,000 catalogs, it is a valuable tool for buyers. Practically every purchasing department has access to this source, either through the 34-volume book series or CD-ROMs.

Suppliers also may be found at trade exhibits, in supplier catalogs, or via recommendations from other knowledgeable sources, such as salesmen and engineers. Probably the most important and frequently used source will soon be the World Wide Web; countless firms maintain Web pages and are listed in online catalogs and directories.

Many firms find themselves in a situation where a suitable supplier cannot be found. In this situation, the firm is forced to develop a supplier. Supplier development is sometimes referred to as "reverse marketing," which entails finding the supplier with the most potential for success and providing the resources necessary for the supplier to manufacture the needed product. This could include training in production processes, quality, and management assistance, as well as providing temporary personnel, tooling, and even financing.

When the product being purchased is standard and readily available, most firms choose to utilize the competitive bidding process of supplier selection. This involves little or no negotiation. A request for bids is sent to a limited number of qualified suppliers asking for a price quote for the product, given the terms and conditions of the contract. The contract generally goes to the lowest bidder. For government bid requests, the contract legally must go to the lowest bidder qualified to fulfill the contract

**NEGOTIATION**

When competitive bidding is not the appropriate mechanism for reaching the purchasing department's objectives, the buyer turns to the process of negotiation. This does not indicate a second-choice alternative, since the negotiation process is more likely to lead to a complete understanding of all issues involved between the supplier and the purchasing firm. This improved understanding can greatly reduce the number and impact of unseen problems that may arise later.

A number of circumstances dictate the use of negotiation. When a thorough analysis is required to solve a difficult make-or-buy decision, or when the risks and costs involved cannot be accurately predetermined, negotiation should be used. Also, when a buyer is contracting for a portion of the seller's production capacity rather than a product, negotiation is typically appropriate.

Other circumstances where negotiation is favored include when early supplier involvement is employed, when tooling and setup costs represent a large percentage of the supplier's costs, when production is interrupted frequently for change orders, or when a long time is required to produce the purchased products.

If successful negotiation is to occur, the buyer must have a reasonable knowledge of what is being purchased, the process involved, and any factors that may affect cost, quality, delivery, and service. A thorough cost and/or price analysis is essential. The negotiating buyer must also know the strengths and weaknesses of the negotiating supplier, as well as his own. Also, in light of today's global marketplace, strong cultural awareness is a must. Through proper preparation and some negotiating skill, the purchasing agent should be able to secure a contract that fulfills his/her company's needs and is adequately beneficial to the supplier as well.

**SUPPLIER MANAGEMENT**

After locating proper suppliers and securing contracts, it then falls to the purchasing function to monitor and control the suppliers' performance until the contracts are fulfilled—and beyond, if further business is to be conducted. All purchasing organizations need some vehicle for assessing supplier performance. Many firms have formal supplier-evaluation programs that effectively monitor supplier performance in a number of areas, including quality, quantity delivery, on-time delivery, early delivery (just-in-time users do not like early deliveries), cost, and intangibles.

For some firms, consistent supplier performance results in certification. Supplier certification generally implies (or in some cases formally asserts) that the supplier has been a part of a formal education program, has demonstrated commitment to quality and delivery, and has proven consistency in his processes. Frequently, organizations are able to take delivery from certified suppliers and completely bypass the receiving inspection process.

The buyer is also responsible for maintaining a congenial relationship with the firm's suppliers. If the buyer is an unreasonable negotiator and does not allow the supplier to make an adequate profit, future dealings may be endangered. The supplier may refuse to deal with the buyer in the future, or the supplier may greatly increase the price of a product the buyer could not obtain elsewhere. Also, relations can become strained when the buyer consistently asks for favored treatment such as expediting or constantly changing a particular order's delivery schedule.

**E-PURCHASING AND E-PROCUREMENT**

The Internet and e-commerce is drastically changing the way purchasing is done. Internet use in buying has led to the terms "e-purchasing" or "e-procurement." Certainly, communication needed in competitive bidding, purchase order placement, order tracking, and follow-up are enhanced by the speed and ease afforded by establishing online systems. In addition, negotiation may be enhanced, and reverse auctions facilitated. Reverse auctions allow buying firms to specify a requirement and receive bids from suppliers, with the lowest bid winning.

E-procurement is considered one of the characteristics of a world-class purchasing organization. The use of e-procurement technologies in some firms has resulted in reduced prices for goods and services, shortened order-processing and fulfillment cycles, reduced administrative burdens and costs, improved control over off-contract spending, and better inventory control. It allows firms to expand into trading networks and virtual corporations.

Criteria for e-purchasing include:

* Supporting complete requirements of production (direct) and non-production (indirect) purchasing through a single, internet-based, self-service system.
* Delivering a flexible catalog strategy.
* Providing tools for extensive reporting and analysis.
* Supporting strategic sourcing.
* Enhancing supply-chain collaboration and coordination with partners.

1. **Describe the challenges organizations face as they attempt to integrate**

organizational activities into the supply chain?



1. **Discuss the key enablers of excellence in purchasing and supply chain management**.

# [Excellence in Supply Chain Management by using four main supply chain enablers](http://avuscm.blogspot.com/2012/11/excellence-in-supply-chain-management.html)

**Excellence in Supply Chain Management**

Supply chain management (SCM) is the management of a network of interconnected [businesses](http://en.wikipedia.org/wiki/Business) involved in the ultimate provision of [product](http://en.wikipedia.org/wiki/Product_%28business%29) and [service](http://en.wikipedia.org/wiki/Service_%28economics%29) packages required by end customers (Harland, 1996)(1). Supply chain management spans all movement and storage of [raw materials](http://en.wikipedia.org/wiki/Raw_material), work-in-process inventory, and finished goods from point of origin to point of consumption. Organizations experienced that they must rely on effective supply chains, or networks to be able to compete in the global market and the networked economy.

In the 21st century, changes in the business environment have contributed to the development of supply chain networks. First, as an outcome of globalization and the proliferation of multinational companies, joint ventures, strategic alliances and business partnerships, significant success factors were identified, complementing the earlier "[Just-In-Time](http://en.wikipedia.org/wiki/Just_In_Time_%28business%29)", "Lean Manufacturing" and "Agile Manufacturing" practices.(2)

Organizations have figured out that to be successful in this proactive business world they need to collaborate with their partners in their supply chain. It is obvious that only this way will bring the excellence in their business.

It is experienced by different organizations that bringing the excellence to the environment will also bring benefits for all parties. However, benefits worth some extra initial effort for the enablers and some extra struggle to the barriers of the supply chain collaboration.

Supply chain collaboration enablers are the keys to value creation. They are mostly about positive reaction (problem solving, not punishing), trustworthiness, helping each other, protecting your partner and sharing the benefits. Actually, the system is acting like human nature. As long as you protect, and share with your partner with positive intent, you will always be the number one for your partner. Organizations and business life are surrounded with self-interest or advantage, so if an organization can share the benefit and protect its team, partner, supplier than they can collaborate easily and make their relations even stronger comparing to its competitors. Eventually it will affect the costs, inventories, development cycles, customer service, delivery cycles, public image and competitive advantage.

There are four main supply chain enablers, and these are organizational infrastructure, information technologies, strategic alliance, and human resource management.

A deeper analysis in these titles will give us more details. For instance in organizational infrastructure: there has to be a coherent business strategy that aligns business units towards same goals; formal process flow methodologies to enable the SCM improvements; people committed to and responsible for cross-functional processes; right process metrics identified to guide operating units’ performance toward strategic organizational SCM objective. In information technologies: the operations, marketing and logistics data should be coordinated within the company; data should be readily available for the managers; operations, marketing and logistics data should be coordinated between companies; linking SCM to ERP systems is vital as well. In strategic alliance: expectations should be clearly stated, understood, and agreed upon up front; collaborating on supply chain and product service strategies; top management of partnering companies’ interface on regular basis; top management communicate why strategic alliances are important and should be pursued. In human resource management: The organization should source, hire, and select skilled quality people at all management levels; find change agents to champion SCM implementation; compensation and incentives in place for SCM performance; finding the internal process facilitators; have appropriate job description and responsibilities.

Manufacturer Alpha is a kitchen appliances manufacturer and has a supplier A for electric contacts. In their supply chain collaboration, they have a common interest of the same business scope, kitchen appliances. Also the supplier A wanted to exist in Country B and Manufacturer Alpha wanted to have those electric contacts in Country B. Manufacturer Alpha did have an option to select another brand, supplier B, with the same price but they preferred to share this info with the supplier A and told them they did not wanted to work with supplier B and emphasized that they wanted to do business with supplier A. This openness increased the collaboration and they started to work together. In recognizing the importance of who and what, supplier A was aware of Manufacturer Alpha power in Country B and didn’t want to lose them on the other hand Manufacturer Alpha knew the power of supplier A and their technology. So, Manufacturer Alpha sees supplier A as a path to success. After starting doing business with supplier A, both parties started helping each other. Supplier A sent their design engineers to help Manufacturer Alpha to improve their designs according to their electric contacts and Manufacturer Alpha helped supplier A about learning the Country B market’s potential in this field. They both had clear expectations from both sides. These both companies adjusted their working capitals to one another at the time of economic crisis over the world. And at the beginning this relationship was standing on the trust between two sides.  However, after realizing the huge potential in Country B market, supplier A betrayed Manufacturer Alpha. Instead of supporting only Manufacturer Alpha they have started to support every other opponent in the market. So the trust was broken between two companies. In addition to that there was an absence of a leader in Manufacturer Alpha to pursue this business. Also the technological infrastructure was not enough to maintain the perfect relationship in inventory level. As a result this mutual relationship did not last forever and had lost its longevity because of missing same enablers in Manufacturer Alpha.

Organizations will have enablers and impediments in collaboration. To be successful they need to follow the steps of enablers of SCM on the other hand they need to overcome the impediments of SCM to avoid mistakes. To be able to stay away from troubles they need to pursue the highest technology and should adopt themselves to this technology. They should hire more intelligent professionals so that they won’t have a lack of limited view of the entire supply chain. In addition to those these companies should improve their accessibility for their partners, make it easier to do business with, and avoid inadequate communications.

Obeying these rules and avoiding impediments will bring the capability to apply the enablers of SCM and the after applying the enablers of SCM the success of the company will be accomplished.

1. **What is the difference between a supply chain and a value chain?**

The difference between the Value Chain and the Supply Chain is usually very important two concepts that are mixed or weighted on one side and hindered on the other side.

While the supply chain is a process involved     all parties to fulfill the demands of the customers, we can say that Value Chain is placing a series of interrelated activities involved in the realization of this process to a position, which will create competitive advantage.

Michael Everett Porter, Professor of Business and Economics at Harvard University's Business Department, is the pioneer of the Value Chain idea. The 5 steps in the Value Chain he had mentioned are listed as below:

• Inbound Logistics,

• Operations,

• Outbound Logistics,

• Marketing and Sales,

• Services

These steps in the Value Chain are also referred to as the primary step create a positive value in the cost of materials or services they provide to their customers. It is quite possible that a business employing even only one of these 5 steps at maximum level in their activities would have a competitive advantage in their own sector.

Inbound logistics includes procurement, storing and inventory management.    
Operations are value creation activities for the transformation of inputs into outputs.  
Outbound logistics includes activities for delivering end-products to the customers.   
Marketing and sales activities are the processes related to finding buyers to purchase products.  
Services, include activities like post-sale maintenance, customer support in order to increase value of the product.

Important secondary activities that support the Value Chain are Procurement (Purchasing), Human Resources Management, Technology Investment and Infrastructure.

Supply Chain includes information, products, materials, the different steps of selling and creating a product, that is, the entire flow. Each step in this flow; creation of the product/service, production, transportation of it to some place for sale and then selling, refers to the supply chain of the firm. The supply chain covers all functions, including the realization of customer requests and the receipt of customer requests.

These functions include;

• Product development,

• Marketing,

• Operations,

• Distribution,

• Finance

• Customer service

**Difference Between Supply Chain and Value Chain**

**Supply Chain** refers to the integration of all activities involved in the process of sourcing, procurement, conversion and logistics. On the other hand,**value chain** implies the series of business operations in which utility is added to the goods and services offered by the firm so as to enhance customer value.

Supply Chain is the interconnection of all the functions that starts from the manufacturing of raw material into the finished product and ends when the product reaches the final customer. Value Chain, on the other hand, is a set of activities that focuses on creating or adding value to the product.

These two networks help to provide quality products to the customer at a reasonable price. Most of the time supply chain is juxtaposed with the value chain. In this article, we have compiled all the substantial differences between supply chain and value chain. Have a look.

**Definition of Supply Chain**

Supply Chain is a connection of all the parties, resources, businesses and activities involved in the marketing or distribution through which a product reaches the end user. It creates a link between the channel partners like suppliers, manufacturers, wholesalers, distributors, retailers, and the customer. To put simply, it encompasses the flow and storage of the raw material; semi-finished goods and the finished goods from point of origin to its final destination i.e. consumption.

The process which plans and controls the supply chain operations is known as Supply Chain Management. It is a cross-functional system that manages the movement of raw material, within the organization and the movement of finished goods out of the firm along with full customer satisfaction side by side. The following activities are included in the supply chain:

* Integration
* Sharing of Information
* Development of product
* Procurement
* Production
* Distribution
* Services to customer
* Performance analysis

Definition of Value Chain

Value Chain refers to the range of activities that adds value at every single step in designing, producing, and delivering a quality product to the customer. Value Chain Analysis is used to evaluate the activities within and around the organization and relating to its ability to provide value for money, goods, and services.

The concept of Value Chain Analysis was first evolved by Michael Porter in 1985 in his renowned book “Competitive Advantage”. In his opinion, two major steps involved in the value chain analysis are:

* Identification of individual activities
* Analyzing the value added in each activity and relating it to firm’s competitive strength.

Porter split business activities into two main categories, for the purpose of Value Chain Analysis:

* **Primary Activities:**
  + - **Inbound Logistics**: It deals with receiving, storing and distributing of inputs.
    - **Manufacturing operations**: Conversion of inputs into finished products.
    - **Outbound Logistics**: It is concerned with the collection, storage, and distribution of product or service to customers.
    - **Marketing and Sales**: Involve activities that create awareness among the general public regarding the product.
    - **Services**: All those activities that increase the value of product or services.
* **Support Activities**: These activities help the primary activities and include procurement, technology development, human resource management and infrastructure.

Key Differences Between Supply Chain and Value Chain

The following are the major differences between supply chain and value chain:

1. The integration of all the activities, persons, and business through which a product is transferred from one place to another is known as supply chain. Value Chain refers to a chain of activities that is indulged in adding value to the product in every single step till it reaches the final consumer.
2. The concept of Supply Chain is originated from operational management, whereas value chain is derived from business management.
3. Supply Chain activities include the transfer of material from one place to another. On the other hand, Value Chain is primarily concerned with providing value for price product or service.
4. The order of supply chain begins with product request and ends when it reaches the customer. Unlike value chain, which begins with the customer’s request and ends with the product.
5. The major objective of the supply chain is to gain complete customer satisfaction which is not with the case of the Value Chain.

Conclusion

Supply Chain is described as a tool of business transformation, which minimizes costs and maximizes customer satisfaction by providing the right product at the right time at the right place and the right price. Conversely, Value Chain is a way of getting a competitive advantage, through which a company can beat its competitors along with fulfill

Value Chain vs. Supply Chain: What's the Difference?

Value Chain vs. Supply Chain: An Overview

The term value chain refers to the process in which businesses receive raw materials, add value to them through production, manufacturing, and other processes to create a finished product, and then sell the finished product to consumers. A supply chain represents the steps it takes to get the product or service to the customer, often dealing with [OEM](https://www.investopedia.com/ask/answers/041515/what-original-equipment-manufacturer-oem-automotive-sector.asp) and aftermarket parts.

While a supply chain involves all parties in fulfilling a customer request and leading to customer satisfaction, a value chain is a set of interrelated activities a company uses to create a [competitive advantage](https://www.investopedia.com/terms/c/competitive_advantage.asp).

**KEY TAKEAWAYS**

* The value chain is a process in which a company adds value to its raw materials to produce products eventually sold to consumers.
* The supply chain represents all the steps required to get the product to the customer.
* The value chain gives companies a competitive advantage in the industry, while the supply chain leads to overall customer satisfaction.

Value Chain

The idea of a [value chain](https://www.investopedia.com/terms/v/valuechain.asp) was pioneered by American academic Michael Porter in his 1985 book "Competitive Advantage: Creating and Sustaining Superior Performance." He used the idea to show how companies add value to their raw materials to produce products that are eventually sold to the public.

The concept of the value chain comes from a business management perspective. [Value chain managers look for opportunities to add value to the business](https://www.investopedia.com/ask/answers/043015/how-does-strong-value-chain-management-team-help-company.asp). They may look for ways to cut back on shortages, prepare product plans, and work with others in the chain to add value to the customer.

There are five steps in the value chain process. They give a company the ability to create value exceeding the cost of providing its goods or service to customers. Maximizing the activities in any one of the five steps allows a company to have a [competitive advantage](https://atlas.dotdash.com/terms/c/competitive_advantage.asp) over competitors in its industry. The five steps or activities are:

1. **Inbound Logistics:**Receiving, [warehousing](https://www.investopedia.com/terms/w/warehousing.asp), and inventory control.
2. **Operations:** Value-creating activities that transform inputs into products, such as assembly and manufacturing.
3. **Outbound Logistics:** Activities required to get a finished product to a customer. These include warehousing, inventory management, order fulfillment, and shipping.
4. **Marketing and Sales:** Activities associated with getting a buyer to purchase a product.
5. **Service:** Activities that maintain and enhance a product's value, such as customer support and warranty service.

In order to help streamline the five primary steps, Porter says the value chain also requires a series of support activities. These include procurement, technology development, human resource management, and infrastructure.

A profitable value chain requires connections between what consumers demand and what a company produces. Simply put, the connection or sequence in the value chain originates from the customer's request, moves through the value chain process, and finally ends at the finished product. Value chains place a great amount of focus on things such as product testing, innovation, [research and development](https://www.investopedia.com/terms/r/randd.asp), and marketing.

Supply Chain

The [supply chain](https://www.investopedia.com/terms/s/supplychain.asp) comprises the flow of all information, products, materials, and funds between different stages of creating and selling a product to the end-user. The concept of the supply chain comes from an operational management perspective. Every step in the process—including creating a good or service, manufacturing it, transporting it to a place of sale, and selling it—is part of a company's supply chain.

The supply chain includes all functions involved in receiving and filling a customer request. These functions include:

* Product development
* Marketing
* Operations
* Distribution
* Finance
* [Customer service](https://www.investopedia.com/terms/c/customer-service.asp)

Supply chain management is an important process for most companies and involves many links at large corporations. For this reason, supply chain management requires a lot of skill and expertise to maintain.

While many people believe logistics—or the transportation of goods—to be synonymous with the supply chain, it is only one part of the equation. The supply chain involves the coordination of how and when products are manufactured along with how they are transported.

The primary concerns of supply chain management are the cost of materials and effective product delivery. Proper supply chain management can reduce consumer costs and increase profits for the manufacturer.

1. **Elaborate the functions to be performed in a public warehouse**

A warehouse may be defined as a place used for the storage or accumulation of goods. The function of storage can be carried out successful with the help of warehouses used for storing the goods.

Warehousing can also be defined as assumption of responsibility for the storage of goods. By storing the goods throughout the year and releasing them as and when they are needed, warehousing creates time utility.

**Functions of Warehousing:**

*1. Storage:*

This is the basic function of warehousing. Surplus commodities which are not needed immediately can be stored in warehouses. They can be supplied as and when needed by the customers.

*2. Price Stabilization:*

Warehouses play an important role in the process of price stabilization. It is achieved by the creation of time utility by warehousing. Fall in the prices of goods when their supply is in abundance and rise in their prices during the slack season are avoided.

*3. Risk bearing:*

When the goods are stored in warehouses they are exposed to many risks in the form of theft, deterioration, exploration, fire etc. Warehouses are constructed in such a way as to minimise these risks. Contract of bailment operates when the goods are stored in wave-houses.

The person keeping the goods in warehouses acts as boiler and warehouse keeper acts as boiler. A warehouse keeper has to take the reasonable care of the goods and safeguard them against various risks. For any loss or damage sustained by goods, warehouse keeper shall be liable to the owner of the goods.

*4. Financing:*

Loans can be raised from the warehouse keeper against the goods stored by the owner. Goods act as security for the warehouse keeper. Similarly, banks and other financial institutions also advance loans against warehouse receipts. In this manner, warehousing acts as a source of finance for the businessmen for meeting business operations.

*5. Grading and Packing:*

Warehouses nowadays provide the facilities of packing, processing and grading of goods. Goods can be packed in convenient sizes as per the instructions of the owner.

**Importance of Warehousing in the Development of Trade and Commerce:**

Warehousing or storage refers to the holding and preservation of goods until they are dispatched to the consumers. Generally, there is a time gap between the production and consumption of products. By bridging this gap, storage creates time utility

There is need for storing the goods so as to make them available to buyers as and when required. Some amount of goods is stored at every stage in the marketing process. Proper and adequate arrangements to retail the goods in perfect condition are essential for success in marketing. Storage enables a firm to carry on production in anticipation of demand in future.

A warehouse is a place used for the storage or accumulation of goods. It may also be defined as an establishment that assumes responsibility for the safe custody of goods. Warehouses enable the businessmen to carry on production throughout the year and to sell their products, whenever there is adequate demand.

Need for warehouse arises also because some goods are produced only in a particular season but are demanded throughout the year. Similarly certain products are produced throughout the year but demanded only during a particular season. Warehousing facilitates production and distribution on a large scale.

**Benefits from Warehouses:**

*1.***Regular production***:*

Raw materials need to be stored to enable mass production to be carried on continuously. Sometimes, goods are stored in anticipation of a rise in prices. Warehouses enable manufacturers to produce goods in anticipation of demand in future.

*2.***Time utility:**

A warehouse creates time utility by bringing the time gap between the production and consumption of goods. It helps in making available the goods whenever required or demanded by the customers.

Some goods are produced throughout the year but demanded only during particular seasons, e.g., wool, raincoat, umbrella, heater, etc. on the other hand, some products are demanded throughout the year, but they are produced in certain region, e.g., wheat, rice, potatoes, etc. Goods like rice, tobacco, liquor and jaggery become more valuable with the passage of time.

*3.***Store of surplus goods:**

Basically, a warehouse acts as a store of surplus goods which are not needed immediately. Goods are often produced in anticipation of demand and need to be preserved properly until they are demanded by the customers. Goods which are not required immediately can be stored in a warehouse to meet the demand in future.

*4.***Price stabilization:**

Warehouses reduce violent fluctuations in prices by storing goods when their supply exceeds demand and by releasing them when the demand is more than immediate productions. Warehouses ensure a regular supply of goods in the market. This matching of supply with demand helps to stabilise prices.

*5.***Minimisation of risk:**

Warehouses provide for the safe custody of goods. Perishable products can be preserved in cold storage. By keeping their goods in warehouses, businessmen can minimise the loss from damage, fire, theft etc. The goods kept in the warehouse are generally insured. In case of loss or damage to the goods, the owner of goods can get full compensation from the insurance company.

*6.***Packing and grading:**

Certain products have to be conditioned or processed to make them fit for human use, e.g., coffee, tobacco, etc. A modern warehouse provides facilities for processing, packing, blending, grading etc., of the goods for the purpose of sale. The prospective buyers can inspect the goods kept in a warehouse.

*7.***Financing:**

Warehouses provide a receipt to the owner of goods for the goods kept in the warehouse. The owner can borrow money against the security of goods by making an endorsement on the warehouse receipt. In some countries, warehouse authority’s advance money against the goods deposited in the warehouse. By keeping the imported goods in a bonded warehouse, a businessman can pay customs duty in installments.

**Type of Warehouses:**

**There are three types of warehouses as described below:**

**Private Warehouses:**

The private warehouses are owned and operated by big manufacturers and merchants to fulfill their own storage needs. The goods manufactured or purchased by the owner of the warehouses have a limited value or utility as businessmen in general cannot make use of them because of the heavy investment required in the construction of a warehouse, some big business firms which need large storage capacity on a regular basis and who can afford money, construct and maintain their private warehouses. A big manufacturer or wholesaler may have a network of his own warehouses in different parts of the country.

**Public Warehouses:**

A public warehouse is a specialised business establishment that provides storage facilities to the general public for a certain charge. It may be owned and operated by an individual or a cooperative society. It has to work under a license from the government in accordance with the prescribed rules and regulations.

Public warehouses are very important in the marketing of agricultural products and therefore the government is encouraging the establishment of public warehouses in the cooperative sector. A public warehouse is also known as duty-paid warehouse.

Public warehouses are very useful to the business community. Most of the business enterprises cannot afford to maintain their own warehouses due to huge capital Investment. In many cases the storage facilities required by a business enterprise do not warrant the maintenance of a private warehouse. Such enterprises can meet their storage needs easily and economically by making use of the public warehouses, without heavy investment.

Public warehouses provide storage facilities to small manufacturers and traders at low cost. These warehouses are well constructed and guarded round the clock to ensure safe custody of goods. Public warehouses are generally located near the junctions of railways, highways and waterways.

They provide, therefore, excellent facilities for the easy receipt, dispatch, loading and unloading of goods. They also use mechanical devices for the handling of heavy and bulky goods. A public warehouse enables a businessman to serve his customers quickly and economically by carrying regional stocks near the important trading centres or markets of two countries.

Public warehouses provide facilities for the inspection of goods by prospective buyers. They also permit packaging, grading and grading of goods. The public warehouses receipts are good collateral securities for borrowings.

**Bonded Warehouses:**

Bonded warehouses are licensed by the government to accept imported goods for storage until the payment of custom duty. They are located near the ports. These warehouses are either operated by the government or work under the control of custom authorities.

The warehouse is required to give an undertaking or ‘Bond’ that it will not allow the goods to be removed without the consent of the custom authorities. The goods are held in bond and cannot be withdrawn without paying the custom duty. The goods stored in bonded warehouses cannot be interfered by the owner without the permission of customs authorities. Hence the name bonded warehouse.

Bonded warehouses are very helpful to importers and exporters. If an importer is unable or unwilling to pay customs duty immediately after the arrival of goods he can store the goods in a bonded warehouse. He can withdraw the goods in installments by paying the customs duty proportionately.

**Functions of Warehouses**

preserve goods on a large-scale in a systematic and orderly  
manner. They provide protection to goods against heat, wind, storm, moisture, etc. and  
also cut down losses due to spoilage, wastage etc. This is the basic function of every  
warehouse. In addition to this, warehouses nowadays also perform a variety of other  
functions. In this section let us learn about the various functions of warehouses.  
  
Warehouses perform the following functions-  
i. Storage of goods  
ii. Protection of goods  
iii. Risk bearing  
iv. Financing  
v. Processing  
vi. Grading and branding  
vii. Transportation  
  
We shall now discuss each of these functions.

* 1. **Storage of goods**  
     The basic function of warehouses is to store large stock of goods.  
     These goods are stored from the time of their production or purchase till their  
     consumption or use.
  2. **Protection of goods**  
     A warehouse provides protection of goods from loss or damage  
     due to heat, dust, wind and moisture, etc. It makes special arrangements for different  
     products according to their nature. It cuts down losses due to spoilage and wastage  
     during storage.
  3. **Risk bearing**Warehouses take over the risks incidental to storage of goods. Once  
     goods are handed over to the warehouse-keeper for storage, the responsibility of  
     these goods passes on to the warehouse-keeper. Thus, the risk of loss or damage to  
     goods in storage is borne by the warehouse keeper. Since it is bound to return the  
     goods in good condition, the warehouse becomes responsible for any loss, theft or  
     damage, etc. Thus, it takes all precautions to prevent any mishap.
  4. **Financing**  
     When goods are deposited in any warehouse, the depositor gets a receipt,  
     which acts as a proof about the deposit of goods. The warehouses can also issue a  
     document in favour of the owner of the goods, which is called warehouse-keeper’s  
     warrant. This warrant is a document of title and can be transferred by simple  
     endorsement and delivery. So while the goods are in custody of the warehouse-keeper,  
     the businessmen can obtain loans from banks and other financial institutions keeping  
     this warrant as security. In some cases, warehouses also give advances of money to  
     the depositors for a short period keeping their goods as security.
  5. **Processing**  
     Certain commodities are not consumed in the form they are produced.  
     Processing is required to make them consumable. For example, paddy is polished,  
     timber is seasoned, and fruits are ripened, etc. Sometimes warehouses also undertake  
     these activities on behalf of the owners.
  6. **Grading and branding**  
     On request warehouses also perform the functions of grading  
     and branding of goods on behalf of the manufacturer, wholesaler or the importer of  
     goods. It also provides facilities for mixing, blending and packaging of goods for the  
     convenience of handling and sale.
  7. **Transportation**  
     In some cases warehouses provide transport arrangement to the  
     bulk depositors. It collects goods from the place of production and also sends goods  
     to the place of delivery on request of the depositors.

1. **Describe about ―cross-docking and its importance**

Many things determine the growth of manufacturing companies. Some of the examples of such things are the transportation of products, sources of raw materials, and machinery. In the modern world of business, people in the industry must use machines when producing products and services for sale. Manufacturing firms must rely on automated machines to increase production. Machines also enable manufacturing companies to market their products and services. Machines like computers enable manufacturers to advertise their products and services on the website, social media sites, and use of emails. The availability of raw materials enables companies manufacture products without halt. Transportation of products is another thing that cannot be left out in the operation of the manufacturing firms. Trucking, logistics, and cross-docking are terms used while transporting products from one place to another. Transport is the general term used to describe the transfer of products and services from one destination to another. Products can, for example, be transported from wholesalers to retailers in the supply chain. Logistics is [**this**](https://www.floship.com/cross-docking/) term used to describe the process of planning and to control the transportation of products and services from manufacturers to consumers.

Cross-docking is closely related to logistics. Cross-docking is the process of transporting manufactured products from the plant directly to customers without storing them in a warehouse. This technique involves the use of inbound and outbound tractors to make products to reach to customers. Inbound trucks are vehicles that are involved in loading the products from the manufacturing plant directly to shipping tractors. Outbound tractors are vehicles that play a role in transporting the manufactured products directly to customers without any handling by the second party. This method removes the need to have other suppliers in the chain. Cross-docking is being embraced by many manufacturing plants nowadays. Cross-docking is of great importance in some ways. Cross-docking aids in sorting the products before they are loaded into the shipping tractors.

Sorting aids in distributing the products to individual and multiple customers. Cross-docking makes the manufacturing company remove the need for building warehouses. In actual sense, the process of putting manufactured goods into the warehouse before shipping is tiresome. Cross-docking removes the chances of handling the products before they reach to customers. Frequent handling of the products sometimes damages their packaging items. Customers are known to get satisfied by getting non-tampered products through cross docking method. Manufacturing companies save much of their cash through cross-docking. Hiring manual labor force in the inbound and outbound section can cost much to the company so [**visit website**](https://floship.com/e-commerce-fulfillment/)**.**

# A) What is Cross-docking – Understanding the concept & definition

* [What is Cross-docking – Understanding the concept & definition](https://www.aalhysterforklifts.com.au/index.php/about/blog-post/what_is_cross_docking_understanding_the_concept_definition)
* [Advantages and disadvantages of cross-docking](https://www.aalhysterforklifts.com.au/index.php/about/blog-post/advantages_and_disadvantages_of_cross_docking)

Speed and productivity of a supply chain has become an important factor of growth for organisations.  Cross-docking is just one strategy that can be implemented to help achieve a competitive advantage.  Implemented appropriately and in the right conditions, cross-docking can provide significant improvements in efficiency and handling times.

**What is cross docking?**

Cross docking is a logistics procedure where products from a supplier or manufacturing plant are distributed directly to a customer or retail chain with marginal to no handling or storage time.  Cross docking takes place in a distribution docking terminal; usually consisting of trucks and dock doors on two (inbound and outbound) sides with minimal storage space.  The name ‘cross docking’ explains the process of receiving products through an inbound dock and then transferring them across the dock to the outbound transportation dock.

In simple terms, inbound products arrive through transportation such as trucks/trailers and are allocated to a receiving dock on one side of the ‘cross dock’ terminal.  Once the inbound transportation has been docked its products can be moved either directly or indirectly to the outbound destinations; they can be unloaded, sorted and screened to identify their end destinations.  After being sorted, products are moved to the other end of the ‘cross dock’ terminal via a forklift, conveyor belt, pallet truck or another means of transportation to their destined outbound dock.  When the outbound transportation has been loaded, the products can then make their way to customers.

**When is cross-docking used?**

The process of cross docking will not suit every warehouse needs, it is therefore important to make an informed decision as to whether cross-docking will increase the productivity, costs and customer satisfaction for your specific business.  Cross docking can advance the supply chain for a variety of specific products.  For one, unpreserved or temperature-controlled items such as food which need to be transported as quickly as possible can be benefitted by this process.  Additionally, already packaged and sorted products ready for transportation to a particular customer can become a faster and more efficient process through cross docking.

Some of the main reasons cross docking is implemented is to:

* Provide a central site for products to be sorted and similar products combined to be delivered to multiple destinations in the most productive and fastest method.  This process can be described as “hub and spoke”
* Combine numerous smaller product loads into one method of transport to save on transportation costs.  This process can be described as ‘consolidation arrangements.
* Break down large product loads into smaller loads for transportation to create an easier delivery process to the customer.  This process can be described as ‘deconsolidation arrangements.

Hopefully this blog assists you in understanding the concept of cross-docking and why it is implemented into an organisations supply chain process.  The next part to this blog will detail the advantages and disadvantages of cross-docking for a greater understanding of this process.

1. **Discuss activity profiling in a warehouse**

Often in a murder mystery, detectives profile a killer based on the series of clues and facts. This profile gives them an idea as to the character they are looking for and enables them to predict his actions. Not that your warehouse is a suspect in any crime but profiling its activities can be a great help in understanding its operations. A comprehensive profile based on historical and current data reveals characteristics that allow you to make decisions on storage and handling alternatives, slotting options, pick line requirements, system requirements, pick methods, and order releasing strategies. With more detailed analysis you can even predict how your warehouse will operate, providing you the invaluable opportunity of being able to prepare for the future.

Two main categories of profiles make up a basic warehouse profiling set: customer order profiles and item activity profiles. Customer order profiles represent the outbound activity, i.e., how the customers are ordering the products. Item activity profiles provide insight into viable storing and slotting options for each item within the warehouse.

**Customer Order Profiles**

The three most basic customer order profiles are defined below.

**Order Mix Distribution:**

These distributions answer warehouse zoning questions such as “Should my fast, medium, and slow movers be zoned separately in the warehouse?” To answer this question, a distribution of the orders for fast, medium, or slow movers is compared with any combination of the three. If warehouse data indicates that most orders call for a mix of fast and slow movers, zoning the items by velocity will have order consolidation impacts that need to be considered. Order mix profiles are also used to analyze the percentage of order lines for full cartons, broken cartons, or a combination of the two. Analysis of this information provides options on storing full and broken cartons together. The goal is to determine what percentage of your customers is ordering full and broken carton quantities of the same item, before investing time and money in changing the current storage strategy.

**Order Increment Distribution:**

The order line distribution of the percent of a full carton ordered is beneficial when evaluating if the current packaging is in logical increments for the customer. For example, if results indicate that 90% of the customers are ordering ¸ carton quantities, the warehouse can consider effective alternatives. Options could involve first the supplier by changing the carton size, second the warehouse operations by breaking down cartons at receiving in order to save time during picking, and third, the marketing department by encouraging customers to order in full carton quantities.

**Order Lines Distribution:**

This distribution of the number of lines contained on each order is important when evaluating operating strategies. A warehouse with mainly one and two line orders would most likely have a very different picking strategy than a warehouse with many large multi-line orders. If your graph looks like figure 1 and you have a significant number of single-line piece-pick orders you may want to consider batch label picking these orders.

**Item Activity Profiles**

Item Activity Profiles are beneficial when analyzing products’ activities for the purposes of determining storage mode, product slotting, and facility layout options.

There are several types of item profiles, the three most basic are defined next.

Popularity profile- is a ranking of the items based on how often they are ordered or picked (frequency). Volume profile is a ranking of the items based on how much is ordered (cube movement). Finally, the item order completion profile displays the items ranked from most to least popular against the order set. This profile reveals the percentage of the orders that will be completed by a subset of the items and is valuable when conducting cost benefit analysis for improved productivity. The chart in figure 2 shows that 30% of the items complete 90% of all orders. This information is useful because it allows operations to make improvements, such as automation of a smaller area, yet still benefit 90% of all orders.

The best way to understand how effective profiles can be is by reviewing some examples. A tactical then a strategic profiling approach is discussed next.

### **What are the main forms of warehouse storage?**

There are 5 principle kinds of warehouse storage:

* [Pallet racking](https://www.awsltd.biz/storage-systems/warehouse-pallet-racking/)
* [Shelving](https://www.awsltd.biz/storage-systems/warehouse-shelving/)
* [Mobile shelving](https://www.awsltd.biz/storage-systems/mobile-shelving/)
* [Multi-tier racking](https://www.awsltd.biz/storage-systems/multi-tier-warehouse-storage/)
* [Mezzanine flooring](https://www.awsltd.biz/mezzanine-floors/).

They all have very particular applications, which depend on the size, weight and nature of your stock, as well as the size and layout of the warehouse.

Within each category, especially pallet racking and storage there are many subcategories.

Here’s a rundown of them all, to give you an idea of which one(s) will suit your warehouse best.

### **Pallet Racking**

Pallets: the most common and essential component of logistical stock storage and movement. Made of wood, metal or plastic,

Anything which is delivered and stored in boxes and requires inventory logging is a prime candidate for pallet racking.

The most important considerations with pallet racking are access/movement, weight, stability and space. Weight limits must be strictly adhered to and all pallet racking must be inspected and maintained regularly to make sure that it is stable enough not to risk toppling. Aisle space required will depend on your specific space requirements or limitations but consider whether forklift access will be just forwards and backwards or require a turning circle with a pallet attached.

**There are 13 main types of pallet racking:**

* Carton Flow Racking/Carton Live Storage – bays with roller tracks and gradients, so that stock can roll down and be replaced. Better for smaller, unboxed stock, hence the name.
* Cantilever Racking – Storage utilising beams which anchor at one end, primarily used for timber, piping, plasterboard and other long loads.
* Coil Racking – You might have seen this used to store chains and cables in DIY stores, it’s just a system of spooling cools, allowing lengths to be cut.
* Double Deep Racking – Pallets stored two rows deep, requires a specialised forklift or a double deep handling attachment.
* Drive-In Racking – Pallets placed so that they can slide back on a rail, good for creating more space.
* Drive-Through Racking – The same as drive-in racking, but goods can be accessed from two sides instead of one
* High-Bay Racking – Racking with racks fixed to the walls and roof for higher storage, a fully automated retrieval system is usually involved.
* Mobile Racking – Racking with sensor technology for automated retrieval.
* Narrow Aisle Racking – A narrower system for increased storage, recently forklifts have been developed which can work effectively in these systems.
* Pallet Live Racking – Racking with inclined rollers, also known as gravity flow racking
* Push Back Racking – Racking with deeper aisles so that stock can be ‘pushed’ further into the racking
* Shuttle Racking – A shuttle is built into the shelving system which moves the pallets to the back of the aisle.
* Vertical Racking – Upright storage for long stock, secured by metal arms. Stock is usually stored individually for easy access.

### **Shelving**

This one is self-explanatory. Stock sits on static shelves rather than mobile pallets, so cannot be retrieved via forklift. But shelving is ideal for quick, easy access to stock, just as if you were in aisles at a shop.

For this reason, it’s far more applicable for small, light items requiring manual picking and placement – such as agricultural produce, clothing, machine parts and components and small products. Anything too heavy to carry alone can’t be stored this way.

Many shelved items need to be handled with care. Height is the main thing to take into consideration after weight, as high shelves require ladder access. There are two main types of static shelves:

* Short Span Shelving – Better suited to smaller stock items, although most systems are adjustable.
* Long Span Shelving – Larger units with space for bigger items.

### **Mobile Shelving**

Often used for archiving and data storage, mobile shelving uses storage shelves fitted with a traction system.

The kind of stock kept in this environment can be kept in closely packed, compact storage when access isn’t needed, making it an ideal solution for archiving and retail store back areas.

For smaller premises where space is at a tight premium, mobile shelving represents an ideal way of making the most of the available storage space.

Typically, mobile shelving units are on a level track way, with the track either built into the floor or mounted on top.

In order to specify the tracks, a clear definition of the type of flooring in the premises is needed, and in particular whether it is possible to lay tracking which will be stable, remain in place and not degrade the floor integrity.

Mobile shelving solutions also use a locking mechanism on the shelves to keep them secured when they aren’t in use. Consideration should also be given to whether manual or mechanical mobile shelving system is required.

### **Multi-Tier Racking**

Multi-tier racking is ideal if you want to take full advantage of the vertical space you have in your warehouse. Multi-tier racking systems have different tiers, much like floors, so that stock can be accessed manually all the way up to the maximum limit of vertical storage.

Often this is achieved with a system of mezzanine flooring and stairs, although sometimes scissor lifts are also used. The storage they offer is very dense, so it’s most effective when you have large quantities of stock with a relatively small individual unit size.

### **Mezzanine Flooring**

A warehouse mezzanine floor can yield a massive amount of extra storage space. Effectively, you’re just constructing a second floor above existing aisles, which provides extra shelving space, working areas for staff to pick and pack or check and move stock on.

Mezzanines don’t always need to be restricted to a single level; they can provide two or even three extra levels.

Mezzanine flooring technology has advanced dramatically in recent years, with a whole variety of custom designs on offer.

Because of these advances, virtually all mezzanine flooring is custom designed and fitted to integrate with most storage situations in virtually any warehouse situation.

It’s best to use a company that can manage the whole process for you – from designing and installing bespoke mezzanine systems to advising on how you should fit out and make best use of your additional space, as well as embedding the important additional features you may need.

Options typically include suspended ceilings, integrated light fixtures, lift systems (automatic or manual), through-floor conveyers and fire safety appliances. Take careful note of how heavy or fragile your stock is when deciding.

[Acorn Warehouse Solutions](https://www.awsltd.biz/) has decades of experience in warehouse planning, fit-outs, maintenance and expansion – including installation of [mezzanine floors and flooring](https://www.awsltd.biz/mezzanine-floors/)and repurposing of [racking](https://www.awsltd.biz/storage-systems/warehouse-pallet-racking/) space. For us, warehouse safety is second nature.

### **Categories**

* [Information](https://www.awsltd.biz/category/information/)
* [Mezzanine Floors](https://www.awsltd.biz/category/mezzanine-floors/)
* [Mobile shelving](https://www.awsltd.biz/category/uncategorized/)
* [News](https://www.awsltd.biz/category/news/)
* [Racking Inspections](https://www.awsltd.biz/category/racking-inspections/)
* [Racking Repairs](https://www.awsltd.biz/category/racking-repairs/)
* [Warehouse Fit-Outs](https://www.awsltd.biz/category/warehouse-fit-outs/)
* [Warehouse Re-fits](https://www.awsltd.biz/category/warehouse-re-fits/)
* [Warehouse Storage](https://www.awsltd.biz/category/warehouse-storage/)
* [Mezzanine Floors](https://www.awsltd.biz/mezzanine-floors/)
* [Shelving](https://www.awsltd.biz/shelving/)

# 5 Factors to Consider when Choosing Warehouse Location

Deciding on a warehouse location is a significant decision that impacts every aspect of a business -- finding a balance between a convenient location and a reasonable rent price is integral. The location of your warehouse directly contributes to the efficiency of your company as well as the overall customer experience. If you’re on the search for leasing or purchasing a warehouse location, you know just how difficult it can be to make such a monumental decision. Here are some factors to consider to ensure your company’s ability to effectively serve your customers in an efficient, effective, and profitable manner.

## 1. **Desired Consumer Base**

When choosing a location for a warehouse, keep your customers’ locations in mind. Determine your customer base and pinpoint the region or regions that you are trying to serve. Having a warehouse location that is in close proximity to your desired consumer base allows for faster deliveries. Not only will deliveries be faster, but the close proximity will also reduce shipping costs. Faster deliveries and reduced shipping costs will positively contribute to the consumer’s overall customer experience -- when the shipping process is faster and cheaper, the customer will be happier and will be more likely to remain a loyal customer.

## 2. **Proximity to Carrier Services**

Consider your warehouse’s proximity to carrier services. If your warehouse is located near carrier facilities, it will streamline the process of shipping your product(s) to your customer. Find a good balance -- find a location that offers both convenience and proximity to your customers as well as a carrier service, making the shipping process easier and faster for both your company and the customers. Determine a reasonable balance of distance between the manufacturing location, warehouse storage, and customer and consider the transportation and shipping costs that go with that distance.

## 3. **Storage Requirements**

Take account of any special accommodations that you may have to make for your products. Are your products hazardous? Flammable? Fragile? Make sure that the proper accommodations are able to be made at your desired warehouse location. Plan ahead. Don’t waste time and resources finding a warehouse space and then outgrowing the space shortly after. Save time and effort by estimating projected growth to be able to figure out an accurate idea of the storage your company needs. Consider leasing options that allow flexibility in storage space based on changing buyer demographics that your company may experience. Make an educated observation of these factors to ensure the safety of your warehouse location.

## 4. **Workforce Availability**

The demographics of the warehouse location may be more important that the physical space. Determine your labor needs. Not every geographic location is able to provide the desired workforce with the right skills and right price. Consider the supply and demand of workforce availability -- low workforce availability and high demand will drive salaries up. Workforce availability can impact overall company costs, therefore doing research on the geographic location is integral. To research and understand the demographics of the area, research the educational attainment and income levels of the city or state, which can be found on government websites. Understanding the workforce is important because it impacts your company’s employee retention and turnover rates, productivity, and employee related costs.

## 5. **Longevity**

Consider the longevity of your warehouse location -- will it be able to accommodate the growth or shrinking of your business? Analyze the potential growth of your company and determine if the warehouse location has room for expansion if needed. If your product is seasonal, consider finding a location that offers seasonal leases or working with companies, such as [Flow space](https://www.flow.space/), that offer flexible in storage options. Understand the potential of the warehouse space and plan for longevity.

Choosing a warehouse location requires extensive research and planning. Make sure that you consider these five factors when considering potential warehouse locations. The location of your warehouse can be mutually beneficial for your company as well as your customers, overall providing a more efficient, effective, and profitable experience.

1. **Describe the various storage systems used in a warehouse for different applications**

**Main Types of Warehouse Storage management**

Your new warehouse lease is finalised.

It’s got all the space you need for the foreseeable future.

You know exactly the type of stock it’s going to hold, and the frequency with which it will move in and out. The doors and loading bays are all designed to allow smooth flow of goods.

So now all that’s needed is the racking and other forms of storage to fill the void.

It’s that ‘other types of storage’ where the detail lies. Because the subtle differences in the many types of warehouse storage solutions can often be misunderstood.

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Anything which is delivered and stored in boxes and requires inventory logging is a prime candidate for pallet racking.

The most important considerations with pallet racking are access/movement, weight, stability and space. Weight limits must be strictly adhered to and all pallet racking must be inspected and maintained regularly to make sure that it is stable enough not to risk toppling. Aisle space required will depend on your specific space requirements or limitations, but consider whether forklift access will be just forwards and backwards or require a turning circle with a pallet attached.

**There are 13 main types of pallet racking:**

* Carton Flow Racking/Carton Live Storage – bays with roller tracks and gradients, so that stock can roll down and be replaced. Better for smaller, unboxed stock, hence the name.
* Cantilever Racking – Storage utilising beams which anchor at one end, primarily used for timber, piping, plasterboard and other long loads.
* Coil Racking – You might have seen this used to store chains and cables in DIY stores, it’s just a system of spooling cools, allowing lengths to be cut.
* Double Deep Racking – Pallets stored two rows deep, requires a specialised forklift or a double deep handling attachment.
* Drive-In Racking – Pallets placed so that they can slide back on a rail, good for creating more space.
* Drive-Through Racking – The same as drive-in racking, but goods can be accessed from two sides instead of one
* High-Bay Racking – Racking with racks fixed to the walls and roof for higher storage, a fully automated retrieval system is usually involved.
* Mobile Racking – Racking with sensor technology for automated retrieval.
* Narrow Aisle Racking – A narrower system for increased storage, recently forklifts have been developed which can work effectively in these systems.
* Pallet Live Racking – Racking with inclined rollers, also known as gravity flow racking
* Push Back Racking – Racking with deeper aisles so that stock can be ‘pushed’ further into the racking
* Shuttle Racking – A shuttle is built into the shelving system which moves the pallets to the back of the aisle.
* Vertical Racking – Upright storage for long stock, secured by metal arms. Stock is usually stored individually for easy access.

**Shelving**

This one is fairly self-explanatory. Stock sits on static shelves rather than mobile pallets, so cannot be retrieved via forklift. But shelving is ideal for quick, easy access to stock, just as if you were in aisles at a shop.

For this reason, it’s far more applicable for small, light items requiring manual picking and placement – such as agricultural produce, clothing, machine parts and components and small products. Anything too heavy to carry alone can’t be stored this way.

Many shelved items need to be handled with care. Height is the main thing to take into consideration after weight, as high shelves require ladder access. There are two main types of static shelves:

* Short Span Shelving – Better suited to smaller stock items, although most systems are adjustable.
* Long Span Shelving – Larger units with space for bigger items.

**Mobile Shelving**

Often used for archiving and data storage, mobile shelving uses storage shelves fitted with a traction system.

The kind of stock kept in this environment can be kept in closely packed, compact storage when access isn’t needed, making it an ideal solution for archiving and retail store back areas.

For smaller premises where space is at a tight premium, mobile shelving represents an ideal way of making the most of the available storage space.

Typically, mobile shelving units are on a level track way, with the track either built into the floor or mounted on top.

In order to specify the tracks, a clear definition of the type of flooring in the premises is needed, and in particular whether it is possible to lay tracking which will be stable, remain in place and not degrade the floor integrity.

Mobile shelving solutions also use a locking mechanism on the shelves to keep them secured when they aren’t in use. Consideration should also be given to whether manual or mechanical mobile shelving system is required.

**Multi-Tier Racking**

Multi-tier racking is ideal if you want to take full advantage of the vertical space you have in your warehouse. Multi-tier racking systems have different tiers, much like floors, so that stock can be accessed manually all the way up to the maximum limit of vertical storage.

Often this is achieved with a system of mezzanine flooring and stairs, although sometimes scissor lifts are also used. The storage they offer is very dense, so it’s most effective when you have large quantities of stock with a relatively small individual unit size.

**Mezzanine Flooring**

A warehouse mezzanine floor can yield a massive amount of extra storage space. Effectively, you’re just constructing a second floor above existing aisles, which provides extra shelving space, working areas for staff to pick and pack or check and move stock on.

Mezzanines don’t always need to be restricted to a single level; they can provide two or even three extra levels.

Mezzanine flooring technology has advanced dramatically in recent years, with a whole variety of custom designs on offer.

Because of these advances, virtually all mezzanine flooring is custom designed and fitted to integrate with most storage situations in virtually any warehouse situation.

It’s best to use a company that can manage the whole process for you – from designing and installing bespoke mezzanine systems to advising on how you should fit out and make best use of your additional space, as well as embedding the important additional features you may need.

Options typically include suspended ceilings, integrated light fixtures, lift systems (automatic or manual), through-floor conveyers and fire safety appliances. Take careful note of how heavy or fragile your stock is when deciding.

[Acorn Warehouse Solutions](https://www.awsltd.biz/) has decades of experience in warehouse planning, fit-outs, maintenance and expansion – including installation of [mezzanine floors and flooring](https://www.awsltd.biz/mezzanine-floors/)and repurposing of [racking](https://www.awsltd.biz/storage-systems/warehouse-pallet-racking/) space. For us, warehouse safety is second nature.

[**What is a Warehouse Management System?**](https://www.qstockinventory.com/blog/warehouse-management-system/)

A Warehouse Management System (WMS) is a software application specializing in supporting the day to day operations within a warehouse. The application does this by allowing the users to have a centralized system where different warehouse management tasks are managed through an interface on a handheld device or a tablet working in the warehouse or a desktop in the office. This makes running a warehouse both efficient and easy, and also ensures that minimal if any losses occur in the different warehouse processes. The real gain is in customer service. Imagine knowing exactly where every product is, knowing when to re-order, and how much to re-order or produce. These things seem like a business goal, but for a customer it means they can get the product faster, without backorders or errors, so they are more likely to return.

**What does a Warehouse Management System (WMS) do?**

A warehouse management system is used to control and track the transfer and storage of materials in a warehouse. The system involves a number of processes that are important when shipping, receiving, or even putting away materials and integrates with other systems in the supply chain to ensure data transparency throughout your enterprise.

**Receiving goods**

The WMS provides a simple process that is to be followed when handling a shipment that has arrived at the warehouse. The process can be customized to suit different users’ requirements but its core function is to ensure that all shipments are handled properly to minimize on losses and also save on time.

**Tracking inventory**

A WMS enables warehouse owners to keep a tab of all the stock in the warehouse. This is important because it ensures that the warehouse management team is able to know when there is enough stock in the warehouse and know when to order for more stock to prevent shortages. This saves on space as overstocking is prevented and also ensures that resources are well distributed to ensure a smooth warehouse management.

**Slotting for Efficiency**

A WMS enables users to model an efficient way of storing different products in a warehouse depending on different factors like demand and weight. This ensures that the warehouse is arranged in such a way that products that move faster or are heavier are stored close to the door for faster processing of orders, and products that are used together are stored in close proximity. This makes running the warehouse easy and efficient.

**Labor visibility**

The WMS system eliminates the need to get more labor to undertake some of the functions that are managed at a central point in WMS. Probably the biggest labor savings is eliminating full inventory counts which can often happen monthly or even weekly. A WMS can allow you to do periodic cycle counts without interfering with day to day operations. Reducing on labor can obviously greatly cut back on expenditure simply because the system is not labor intensive.

**Document preparation**

A WMS automates most of the different processes, eliminating the need for paper documents that are bulky, and eat up quite a huge chunk of money when it comes to purchasing them and storing them appropriately. By giving visibility to the system to everyone simultaneously, everyone has the data needed to do their job at their fingertips.

**Picking and Shipping**

A proper WMS ensures that the right product is picked based on your business rules (LIFO or FIFO). A good WMS will make sure that the right orders are shipped to the right people at the right time. With this accuracy, the mistakes that can arise when transporting goods are avoided and ends up as a more efficient and less costly transport system.

**Customer service**

A WMS improves the overall customer service by ensuring that orders are received and processed on time, and the right products are delivered to all customers when and where they need them. The quality of products is maintained enabling users to retain their customers and attract new ones.

**Tracking and Visibility**

For industries that require advanced tracking capabilities, a WMS will allow you to track lot information, expiry dates, UPC, and serial numbers. Each data point adds to the cost to maintain, but often comes with great returns when advanced visibility is required. Recalls and warranty issues are quickly resolved by solving the root problem through trace back instead of just a payout to the customer.

**Reporting**

The best Warehouse Management Systems will be in an easy to use database, like Microsoft SQL and include many reports out of the box. One hidden advantage to having systems is the ability to look at data in new and exciting ways. What percentage of your warehouse is utilized? Should you expand, or find a smaller space? How many transactions are each employee doing per hour? Can you reduce headcount? Can you negotiate better rates with your parcel service based on your cube and weight throughput? Is your pick path setup to be as efficient as possible for your pickers?

How does a Warehouse Management System (WMS) fit into your supply chain?

In a fully integrated solution, you will have your raw materials received into your Warehouse Management System, be consumed by your Material Requirement Planning system and the finished goods be deposited back into the WMS. The WMS will facilitate the tracking of the product through moves and cycle counts while in the warehouse, then finally be picked and sent to either the shipping system or Transportation Management System to route your trucks. The entire time your Enterprise Resource Planning system will be tracking the values, orders, sales, and invoices with all of the systems.

What to look for in a Warehouse Management System (WMS)

There are different types of WMS ranging from simple uncomplicated systems to more complex ones that are more suited for large warehouses. When looking for a WMS system for your warehouse, there are different factors you need to consider before you can settle on one WMS. Some of the things to consider include

**Functions**

Different WMS can perform different functions and are built for different industries. What functions does your business need to meet to satisfy the needs of your customers, any regulating bodies, and your shareholders? Look for a warehouse management system that is configurable and able to scale past where you are, but to where you plan to be in five years.

**Warehouse size**

Larger warehouses require more detailed systems than smaller ones. This is because more activities and functions are carried out in a large warehouse and all such activities and functions require a more detailed system. The larger the warehouse, the higher the cost of travel between locations, and therefore the more important detailed tracking is.

**Customer needs**

By identifying the loopholes in your current system, you will be in a position to determine the functions you require in a WMS, and select a WMS that will ensure that you are able to serve your customers better and increase their satisfaction with the services you provide. Are you an ecommerce site that needs auto-allocation, so your available inventory is always accurate? Do you need to post tracking numbers to your customers? Do you need lot tracking to comply with FDA regulation?

**Cost**

The cost of installing a WMS system differs greatly depending on the complexity of the system and the system vendor. Choose a WMS system that will serve your warehouse better by fulfilling all the required functions, and also one that your business can afford. Choosing a system that is way too expensive for you will only put your business in trouble and end up compromising the quality and efficiency you so much want to improve. Choosing a basic WMS system on the other hand might not serve you sufficiently, especially, if you have many functions in your warehouse. You have to find the right balance between cost and functions when choosing the right WMS for your business. Don’t get caught thinking what your business needs are today, think of where your business needs to be in 5 years and choose a product that can take you there and beyond.

If you are currently running Intacct or QuickBooks and would like to schedule a free consultation to see if Stock is right for you as your next potential Warehouse management system, Contact Us Today by filling in the form below. We would love to hear about your business and how Stock can help you achieve your business goals.

1. **Describe briefly about the qualitative factor rating method for the selection of location of a warehouse**

Deciding on a warehouse location is a significant decision that impacts every aspect of a business -- finding a balance between a convenient location and a reasonable rent price is integral. The location of your warehouse directly contributes to the efficiency of your company as well as the overall customer experience. If you’re on the search for leasing or purchasing a warehouse location, you know just how difficult it can be to make such a monumental decision. Here are some factors to consider to ensure your company’s ability to effectively serve your customers in an efficient, effective, and profitable manner.

**1. Desired Consumer Base**

When choosing a location for a warehouse, keep your customers’ locations in mind. Determine your customer base and pinpoint the region or regions that you are trying to serve. Having a warehouse location that is in close proximity to your desired consumer base allows for faster deliveries. Not only will deliveries be faster, but the close proximity will also reduce shipping costs. Faster deliveries and reduced shipping costs will positively contribute to the consumer’s overall customer experience -- when the shipping process is faster and cheaper, the customer will be happier and will be more likely to remain a loyal customer.

**2. Proximity to Carrier Services**

Consider your warehouse’s proximity to carrier services. If your warehouse is located near carrier facilities, it will streamline the process of shipping your product(s) to your customer. Find a good balance -- find a location that offers both convenience and proximity to your customers as well as a carrier service, making the shipping process easier and faster for both your company and the customers. Determine a reasonable balance of distance between the manufacturing location, warehouse storage, and customer and consider the transportation and shipping costs that go with that distance.

**3. Storage Requirements**

Take account of any special accommodations that you may have to make for your products. Are your products hazardous? Flammable? Fragile? Make sure that the proper accommodations are able to be made at your desired warehouse location. *Plan ahead.* Don’t waste time and resources finding a warehouse space and then outgrowing the space shortly after. Save time and effort by estimating projected growth to be able to figure out an accurate idea of the storage your company needs. Consider leasing options that allow flexibility in storage space based on changing buyer demographics that your company may experience. Make an educated observation of these factors to ensure the safety of your warehouse location.

4. Workforce Availability

The demographics of the warehouse location may be more important that the physical space. Determine your labor needs. Not every geographic location is able to provide the desired workforce with the right skills and right price. Consider the supply and demand of workforce availability -- low workforce availability and high demand will drive salaries up. Workforce availability can impact overall company costs, therefore doing research on the geographic location is integral. To research and understand the demographics of the area, research the educational attainment and income levels of the city or state, which can be found on government websites. Understanding the workforce is important because it impacts your company’s employee retention and turnover rates, productivity, and employee related costs.

5. Longevity

Consider the longevity of your warehouse location -- will it be able to accommodate the growth or shrinking of your business? Analyze the potential growth of your company and determine if the warehouse location has room for expansion if needed. If your product is seasonal, consider finding a location that offers seasonal leases or working with companies, such as [Flowspace](https://www.flow.space/), that offer flexible in storage options. Understand the potential of the warehouse space and plan for longevity.

Choosing a warehouse location requires extensive research and planning. Make sure that you consider these five factors when considering potential warehouse locations. The location of your warehouse can be mutually beneficial for your company as well as your customers, overall providing a more efficient, effective, and profitable experience

1. **What are the risks associated with backdoor (maverick) purchasing as opposed to open tendering most common in public procurements?**

**The risks associated with backdoor or maverick buying**

purchasing interested in controlling this business practice?The risks associated with backdoor or maverick buying and selling are (1) Purchasing policies and procedures will not be followed (2) Higher cost due to different prices from suppliers for same items (3) Inability to achieve efficiency and economy of scale by combining like purchases across a company. Purchasing is interested in controlling this business practice because it bypasses the control of purchasing authority. Maverick

spending is costly and ineffective. Bypassing purchasing policies and procedures will also create confusion in the company. (Coursehero.com, 2016) Ch. 4 (1,4,7,&11)Describe the different types of integration that supply management should become actively involved in.There are three different types of integrations that supply management should become

## **Introduction to E-business**

E-business stands for electronic business. Electronic business is also known as online business. Online business is a business where the transaction takes place online. Here, the buyer and the seller don’t meet personally. The term “e-business” was coined by IBM’s marketing and Internet team in 1996. E-business is a part of e-commerce. E-commerce means electronic commerce.

## **Advantages of e-business**

There are innumerable advantages of e-Business, the most obvious one being the ease of doing business. Some of the major advantages of e-business are as follows:

* **Easy to Set Up:**It is easy to set up an electronic business. You can set up an online business even by sitting at home if you have the required software, a device, and the internet.
* **Cheaper than Traditional Business:**Electronic business is much cheaper than [traditional business](https://www.toppr.com/guides/business-studies/nature-and-purpose-of-business/concept-and-characteristics-of-business/). The cost taken to set up an e-business is much higher than the cost required to set up a traditional business. Also, the transaction cost is effectively less.
* **No Geographical Boundaries:**There are no geographical boundaries for e-business. Anyone can order anything from anywhere at any time. This is one of the benefits of e-business.
* **Government Subsidies:**Online businesses get benefits from the government as the government is trying to promote digitalization.
* **Flexible Business Hours:**Since the internet is always available. E-business breaks down the time barriers that location-based businesses encounter. As long as someone has an Internet connection, you may be able to reach and sell your product or service to these visitors to your business website.

## **Limitations of e-Business**

disadvantages when compared to the traditional way of doing business. Some of the limitations of e-business are as follows:

* **Lack of Personal Touch*:***E-business lacks the personal touch. One cannot touch or feel the product. So it is difficult for the consumers to check the quality of a product. Also, the human touch is missing as well. In the traditional model, we have contact with the salesperson. This lends it a touch of humanity and credibility. It also builds trust with the customer. An e-Business model will always miss out on such attributes.
* **Delivery Time*:***The delivery of the products takes time. In traditional business, you get the product as soon as you buy it. But that doesn’t happen in online business. This lag time often discourages customers. However, e-businesses are trying to resolve such issues by promising very limited delivery times. For example, Amazon now assures one-day delivery. This is an improvement but does not resolve the issue completely
* **Security Issues*:***There are a lot of people who scam through online business. Also, it is easier for hackers to get your financial details. It has a few [security](https://www.toppr.com/guides/business-studies/emerging-modes-of-business/online-transactions-and-security-of-e-transactions/) and integrity issues. This also causes distrust among potential customers.

**the various concerns for e-commerce.**

* Increased competition
* Security
* High start-up cost
* Slow adoption
* Customer Relations Problems
* No human interactions
* Returning Goods
* Fraud

1. viral marketing
2. network marketing
3. BPO
4. e-commerce

Sol. The correct answer is the option “D”. E-commerce or electronic commerce, a subset of e-business, is the purchasing, selling and exchanging of goods and services over computer networks (such as the internet) through which transactions or terms of sale are performed electronically. E-commerce includes buying and selling of goods, information, and services using a network of computers.

Supplier performance measures are a tool to determine whether your supplier is doing their work as expected. What is expected of the supplier should be as described in the supply contract or statement of work, specification, service level agreement or KPIs – or a mixture of some of these.

There are many tools to assist in measurement of supplier performance. Some are paper-based checklists, many are digitally enabled. Electronic performance measurement helps to set consistent measures for suppliers in similar categories or projects. This article will explore the benefits and disadvantages of standardized measures across different suppliers.

Before exploring this, we will provide an overview of supplier performance measures and their purpose.

**Measurements for suppliers of goods and services**

Supplier performance measures may have different considerations depending on whether we are buying goods or services. However, they typically address similar areas, which are important for the performance of the overall organization and its stakeholders. The table below includes some examples.

**Table 1: Examples of measures of supplier performance**

|  |  |  |
| --- | --- | --- |
| **Measurement Are** | **Goods** | **Services** |
| Timeliness | On time delivery of goods or other information | Work completed or response time at or within a specified time period |
| Completeness | Delivery in full | Service completed for the expected duration or with the expected outcome |
| Quality | Low defect rate or unplanned failure | Low re-work, errors or complaints |
| Productivity | Yield, output, process efficiency | Utilization, process efficiency, learning curve |
| Regulatory Compliance | Working within legal standards, health and safety protocols or organizational guidelines | |
| Social Responsibility | Sustainability, diversity or community initiatives | |
| Innovation | Continuous improvement resulting in improved outcomes | |

**How should supplier performance measures be created?**

Each measurement area is influenced by the business needs.  These needs reflect the requirements of the stakeholder / end user or address specific project requirements.  In addition, the measurement area should also address the needs of the organization (for example, there may be an organization-wide requirement to improve working capital or corporate and social responsibility performance.

It is important that supplier performance measures are smart:

* Specific
* Measurable
* Achievable
* Realistic
* Time-based

**In addition, supplier performance measures should:**

* be few in number (perhaps 4 or 5 critical-to-quality areas)
* not require excessive resource to manage
* motivate the supplier to meet and exceed targets

Table 2:  Examples of how supplier performance measures are created

|  |  |  |
| --- | --- | --- |
| **Business Need** | **Example Supplier Performance Measure** | **Example SMART Metric** |
| Improved Quality | Product reliability improvement | * 5% reduction in customer warranty claims within 12 months |
| Better Service | Customer experience improvement | * 10% higher satisfaction rating from external customers or users |
| Reduced Cost | Specification change resulting in lower operating cost | * 2% price reduction each contract year resulting from approved vendor-initiated reengineering activities |

**How are supplier performance measures monitored daily basis?**

It could be the responsibility of the supplier, the buying organization’s Procurement Department or their business stakeholders to monitor how suppliers are performing against these goals.  Often, it is a joint effort because there may be commercial consequences of the supplier performing well or poorly.  For example:

* Good supplier performance may trigger a bonus, or increased workload or a recognition incentive.
* Poor supplier performance may result in application of contractual remedies such as liquidated damages or other sanctions such as the supplier not being considered for additional projects for a period of time.

Often, periodic reviews of performance take place quarterly or annually, in addition to more routine corrective action planning.  This helps to track trends and decide if targets should be adjusted or stretched based on previous performance or changing business needs.

**Should supplier performance measurement be standardized?**

Having consistent measures across similar suppliers / categories or across a project has advantages and disadvantages:

The advantages of standardized supplier performance measures:

* It enables performance standard measures, but supplier-specific targets
* It helps to compare suppliers against each other, creates aspirations and cross-fertilization of good practice
* It helps to compare performance against supplier price, cost and external benchmarks
* Suppliers may perceive this consistency as equitable
* Ease of reporting within organizational systems or tools

The disadvantages of standardized supplier performance measures:

* You may wish any incentives or sanctions to be targeted to what motivates that particular supplier  
  - For example, where you have flexibility to adjust payment terms to reward a small or medium-sized business or provide an award to an organization that relies on public relations successes to win new work
* Suppliers may be more committed to targets if they can contribute to the design of the performance measures or incentive scheme  
  - For example, you might wish to become a customer of choice for some important vendors and want them to feel empowered to strive for goals that help them too
* The measures and targets may be specific to your supplier development goals for specific vendors, to reflect their specific capabilities  
  - For example, you may wish a supplier to grow their capability or capacity to match your own organization’s requirements if they have the resources and aspiration to support you

Where the organization is utilizing digital tools to help gain a universal picture of supplier performance across a wide range of categories, projects or geographies, it can certainly be helpful to provide decision-makers with the facts they need to inform category, supplier and business strategies.  However, having some flexibility within that regime is helpful to demonstrate to suppliers, customers and stakeholders that measurement is driven by their interests primarily rather than reporting for its own sake.

## [**Seven Steps to Measuring Supplier Performance**](http://www.b2b.com/blog/2012/12/07/measuring-supplier-performance/)

There’s no doubt that B2B organizations, from procurement through logistics, produce plenty of data. But are they doing what’s necessary to support the move to data-driven businesses?

To find out, I talked with [Sherry R. Gordon,](http://valuechaingroup.com/about/#sthash.oqf4BMlU.e7q0X3eG.dpbs) president of the [Value Chain Group, LLC](http://valuechaingroup.com/), and a specialist in monitoring supplier performance management. Gordon writes and teaches about enterprise measurement and performance improvement techniques, such as key performance indicators and balanced scorecards.

“In supply chain and manufacturing, you have to be data-driven,” Gordon said, especially in medium-to-large organizations.

Most companies already have specialized systems that support various functions such as procurement, strategic sourcing, contract management or supplier management. These systems generate B2B data, making it easier for groups to become data-driven, she said.

One notable and surprising exception seems to be in China, she said. She’s visited China four times to teach about supplier performance management.

“This is my opinion, but they don’t seem data driven at all over there,” she said. “I talk about data and scorecards and all that and they’d love to have them but they seem to kind of glaze over when I talk about how you really did in and develop this stuff: Where does the information come from, how do you develop a good metric.”

Gordon teaches a seven-step process to help companies identify and capture useful data about their suppliers.

“You start out with aligning whatever it is you’re going to capture with whatever is strategically important to the business and how that translates to suppliers and supply chain management before you start collecting every piece of data you can get your hands on in an organization,” she said. “It gets unwieldy and nobody maintains that kind of a system. It has to be useful.”

described her re-iterative process for supplier performance management:

1: Identify supplier performance goals that align with your organizational goals and objectives.  
2: Develop performance criteria for your suppliers.  
3: Select tools and processes you’ll use to evaluate how well suppliers are meeting these criteria.  
4: Collect the performance data.  
5. Measure and share the results with the supplier.  
6. Create an improvement plan, with measurable goals.  
7: Review and recalibrating your goals and plan periodically to ensure your goals remain in alignment with the company’s emerging strategic objectives.

For most company, the problem isn’t generating B2B data: It’s turning it into useful information. Find out what Gordon and other experts say are the common mistakes B2B organizations make when trying to turn data into actionable business intelligence in our recent B2B.com article, “

1. **Discuss the advantages of electronically transactions between a buyer and seller.**

This article will take you to the ride of understanding an eCommerce world by sharing more information over about its advantages and disadvantages. E-Commerce is one of the powerful online tools which can help your business grow and glow all across the globe.

You can never doubt about the ability to sell goods and services online which have made businesses more viable and profitable. It is really important to see [**the buyers trend**](https://thebuyerstrend.com/) and look over everything before starting an eCommerce store because that is what makes your business to go global by taking strategic decisions.

**Advantages: -**

**1. Speed up the buying process and save time for customers**

It literally speeds up the buying process because when someone thinks of buying one specific product from the physical store which is very far and not easily available. Here how the eCommerce helps the customer to avail the specific product easily and speedily.

For example – Sometimes customer are not able to find a particular product from the store and even by visiting other chained stores, this is where eCommerce come into a scene with a quick response over the requirement by even helping to purchase the particular product without wasting time.

eCommerce helps the one to choose from a wide range of online accessed products easily and get it delivered too; it helps you to access online global market standards.

Such type of buying process can help you to reduce the traveling time and helps you with choosing plenty of options which you might be looking forward to getting your own one.

**2. Personalize the store as per the customer expectation.**

One of the online business benefit which will enhance your [online shopping](https://magnetoitsolutions.com/blog/shopping-carts-for-small-business) experience. It is because every purchase which is made online will be referred as per location and recommended as per customers advanced searches.

It is one kind of personalize store where every customer has a different front page because of their location and previous purchases. Even customers are eligible sometime to get extra services because of previous history and loyalty towards the services. Such kind of store helps the customer to fulfill their expectations.

**3. Reduce recurring cost while hiring virtual support resources.**

One of the factors which can benefit in eCommerce is that by hiring employees is affordable. It is like you can choose to outsource your task and work to your virtual assistants in different countries.

It will make your presence of the company in a different location at the same time always. In this case, you will not need many employees in an eCommerce business as compared retail locations.

**4. Easily retarget your customers.**

There are many ways to retarget the customer and sell the product nicely. Below are some of the techniques which you can use to retarget customers: -

* Share a coupon when customers leave the checkout page.
* Even by sending emails which are pitching upsell and cross-sell.
* Can be done through Google paid and organic search results.
* It can be done through the customer’s number of visits to a specific page with a certain period of time.

**5. Easier to encourage an impulse buy**

Impulse buying is one of the techniques where it works as a common behavior of customer’s perception towards a particular product. It is related to the control of human psychological behavior which is like some people possess personality traits that can be said as impulse buying tendencies.

This is what can be used on an [eCommerce platform](https://magnetoitsolutions.com/blog/which-is-the-fastest-growing-ecommerce-platform-trending-today) too by making the product more attractive with images, other color options and even by showing a video of the product. So the customer can get the same aura of buying the product from the store.

**6. Reviews Available**

It has so many positive recommendations which can give more values to your [eCommerce website](https://www.emiprotechnologies.com/blog/magento-blog-56/post/5-magento-features-that-you-know-but-you-don-t-know-640) and help customers to build more trust over a particular product.  It can help you to be clear and more visible about the product that helps you with more product selection too.

All of the reviews are valuable to customers, which can really help a lot to build trust over the products and services

**7. Able to provide detailed information to the customer.**

Every customer looks for more details over the products so that it can help them to take a wise decision over their purchases. It is one kind of description which really helps a lot and expresses about any particular product.

It is in short one kind of information which is been shared clearly on the description about the [product](https://magnetoitsolutions.com/blog/10-ecommerce-product-optimization-tips), that helps the user to take a final decision on the requirements.  
The flow which is been shared below the product in detail makes the customer to understand it in more details and that makes them to put them on a cart for their final check out with making them aware of all the features and functions of the product.

**8. Best Quality of services in reasonably low operation cost**

It is one of the benefits which plays a very vital role over an eCommerce platform. In most of the case, physical retail stores have to pay a lot to maintain their presence in the market by paying rent or even if its own. There are several upfront costs which affect the store which is physically owned.

E-commerce store will help you cut off more than 60% of the price which has been run through a physical store. When you talk about operation cost it is very high as compared to the online store. One has to pay their staff, location charges, inventory, store design etc., which affects a lot.

**9. Quick and affordable marketing**

You will not have to spend many bucks to market your e-commerce biz. There are many ways to pull your eCommerce business into this online world through various ways of online marketing which are quick and affordable.

**Here are some of the unique ways which can just make you understand and help you with improvising marketing techniques.**

* Always go with great content this is what helps you to be more visible in the market through creative content marketing.
* You can even go for creative marketing video which expresses about the product and services.
* Social networking helps you to make your presence everywhere because there is no one who is currently not into socializing.
* Even there are DIY infographics which helps you to express about presence, you can say contrary that it works as browser.
* It helps you to enlighten the life to old data too.
* Every customer can be reached through digital market just have to focus on the techniques to approach them.

This what makes all things affordable because when you try to same on offline marketing it is expensive and time consuming a lot.

**10. Provide flexibility to the customer to buy product 24/7.**

It has more flexibility over the regular store because the services are available 24/7 and though helps to serve you the services at anytime and anyplace.

There is a lot of change in the online markets recently which are providing you services helping you with the recommendation, sales support, chat support and even helps you find similar products. E-commerce is one of the platforms which available for consumers 24/7 and globally.

**11. Less store setup cost and quick ROI (Return of investments)**

When you talk about eCommerce it has less amount of investment as compared to the offline store, it takes a huge amount of investment to set up an offline store which affects your business a lot by lacking on the return of investments.

This happens all because all investment which is been done over maintaining the store, on the contrary, it takes less amount of investment to make an online one.

Even after investing a lot of money over stock, labor, services, maintenance, electricity bill, rent (if any) etc, these will never help you out to gain profits over your investments. E-commerce stores are affordable and though if you see nicely than you will find that there is not much of investment as compared to the offline store and has more benefits too.

**12. No Geographical limitation, tap the global market form the day one.**

It is like the customer will have access to the online store from anywhere in the world, which can globally be accessed. This is what every customer is looking forward to having as their service because sometimes customers are not able to find a particular product which not available at the store location, but though online store works like a magic to provide them with multiple options. So, that they can avail the services easily.

That is the main reason why [eCommerce store](https://magnetoitsolutions.com/blog/increase-ecommerce-store-sales) helps you to be visible over the global market, where you will be fully available to everyone across the globe from the day one itself.

**13. Reduce Resource hiring and training cost.**

In eCommerce you will not have to hire many employees as compared to the store, it is because when you open an online store your half of the work is been done through approaching customers directly by providing detailed information and visibility of the products.

You will not have to hire a seller to express everything about the product or have to train them. This is what makes eCommerce more effective in cost deduction of hiring and training employees.

**14. Avoid human error while dealing with customers.**

In the path of e-commerce, you will never face the issue of human error because every product is updated with details on the site, so that makes easy for the customer to have more visibility over the products.

This is what makes the customer feel comfortable to buy online as compared to the store. The stores are way more difficult sometimes because due to lack of options, comparison and descriptions.

When you visit a store, you will always find that the seller tries to express with things which are not much convincing but though still, you will have to hear it till the end. This is what makes the customer more confusing to buy or not? It is like getting pitched again and again for the same on what you are not looking for to get checked out.

**15. Environment – Friendly**

You can say the eCommerce is totally eco-friendly as compared to the store. It is because when we visit a store at a time of purchase, we receive a bill, receipts, coupons etc.

These harms our environment a lot and that is the reason why eCommerce bought such services which are much eco-friendly and easy to maintain.

**16. Compare product and price**

In the world of eCommerce, you can compare the products easily which shares a detailed description over it. The most beneficial part of eCommerce is that you can avail and understand the product clearly but though this happens totally opposite when you visit a store.

In store you might not be able to find the product and will not be able to compare it, even you might have to visit multiple shops to know the differences.

This is what saves time for the customers when we look into the world of eCommerce. Every service which are been provided through eCommerce are made to serve customers to have easy access with more details and less time-consuming.

1. **Describe the challenges involved in implementing e-procurement systems?**

procurement leaders wear multiple hats and manage an array of responsibilities—from needs identification to [vendor management](https://kissflow.com/procurement-process/vendor-management/) and payment processing. A day in the procurement department is never slow.

Managing organizational spend while enforcing proper procurement policies is always a constant concern for procurement leaders. What’s worse is that these problems just scratch the tip of the procurement challenge iceberg.

The procurement landscape is inundated with a number of activities like[purchase requisition management](https://kissflow.com/procurement-process/requisition-management-automation/), purchase order process, contract management, [supplier lifecycle management](https://kissflow.com/procurement-process/supplier-lifecycle-mgmt-steps/), and a lot more. Amid the chaos, procurement leaders don’t often have enough time to tackle common challenges in procurement.

Here are six common procurement challenges that haunt businesses of all sizes

**1. Risk mitigation**

Supply risk is always a major challenge in the procurement process. Market risks, potential frauds, cost, quality, and delivery risks constitute the most common type of risks. Additionally, compliance risks like anti-corruption, policy adherence, and more keep your procurement leaders up all night.

**2. Dark purchasing**

Purchases that are made outside the defined [procurement process](https://kissflow.com/procurement-process/) fall under dark purchasing. Such uncontrolled spending can ultimately be expensive for businesses. When items purchased cannot be justified using capital outlay or material inventory, the resulting loss of revenue and control is a significant challenge for organizations of all sizes to tackle.

3. **Long process cycle**

Most often, products and services are procured with a sense of urgency in the last minute. As a result, the actual lead times and the procurement cycle tends to be considerably longer than that anticipated or scheduled. Listed below are the common reasons for delays in the procurement process:

* Delays in preparing technical specifications/TOR/SOW
* Overlooking the procurement schedule
* Extending the timeline to submit bids/proposals
* Failure to start the evaluation process on time
* Setbacks in contract negotiation

**4. Inaccurate data**

In order to make sound procurement decisions, organizations need accurate and reliable data. Making purchases based on inaccurate procurement data can lead to inventory shortages, excess inventory, and other additional procurement challenges that have the potential to impact an organization’s bottom line directly.

**5. Strategic procurement**

As the procurement process continues to become more strategic and collaborative, organizations are starting to realize the benefits of having a solid [procurement strategy](https://kissflow.com/procurement-process/9-procurement-strategy-steps/) in place. However, understanding the strategic implications of every step and figuring out a way to implement it across all functional units of business is a distinct challenge.

**6. Supplier-related issues**

One of the greatest challenges in procurement is [supplier management](https://kissflow.com/procurement-process/supplier-management-process-guide/). From identifying the right supplier to keeping track of vendor performance and ensuring a stable supply of quality products, the whole process is filled with complications.

1. **Why is it important to measure and monitor supplier performance improvement over time?**

The second blog in our Supplier Performance Management series highlights the six benefits of implementing SPM

An MIT study found that 77 percent of companies surveyed said two out of the top three major procurement risk factors were related to suppliers – specifically “dependency on supplier” and “supplier quality problems.” Over-dependency on a supplier and quality issues stemming from a supplier effect your organization’s product quality, brand image, production efficiency and more.

Collecting basic supplier information and completing initial approval or vetting steps are the start of a successful supplier management program. But these actions are not enough to effectively evaluate an ongoing relationship with suppliers. To realize additional value from your supply base, your organization should consider implementing a robust **Supplier Performance Management (SPM)**program.

**Having an SPM program in place helps your organization:**

**Avoid supply chain risk and disruptions**

If you are not deeply familiar with the third-party vendors making up your supply chain, it will be difficult to put measures in place to prevent interruptions and reduce the incidence of risk exposure.  Supplier performance management provides in-depth visibility into the risk a supplier may pose so you can put measures in place to reduce or eliminate that risk as it relates to your supply chain.

**Protect and improve brand/reputation**

A number of corporate brands have been tarnished by the actions of their suppliers – think automobile recalls as a common example. SPM can help you track supplier performance against these KPIs which will enable you to enact corrective actions early and keep your brand and reputation strong in the eyes of your customers and partners.

**Avoid costs and achieve savings**

There are a variety of cost factors tracked using supplier performance management which affect both hard and soft dollar costs. Lack of timely and accurate vendor information can have huge impact on costs and can prevent you from capturing savings. Not only can you track supplier performance on cost and savings related KPIs, the information provided by an SPM system can contribute to cost avoidance and savings achievements because it centralizes supplier data into a single source of truth for everyone interacting with vendors.

**Segment and rank vendors**

As noted in the point above, supplier performance management is useful beyond the supplier managers in your organization. For example, SPM gives procurement groups visibility into specific groups of suppliers and their overall ability to meet your organizations expectations and requirements. With performance data in hand, procurement can make data-based decisions regarding where to direct spend.

**Collaborate with suppliers**

When you collaborate closely with suppliers you create new value for your business. The data collected through a supplier performance management solution can help to start these conversations because it provides the supplier with a view of what is important to your 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. Ultimately, SPM drives the creation of meaningful and mutually beneficial relationships with suppliers.

**Improve internal processes**

Creating a SPM process is a great step towards optimizing your supplier management program. By utilizing a technology-based solution for SPM, organizations can achieve a standardized and automated approach for creating scorecards, issuing and tracking scorecards for completion, and in-depth reporting and analysis. If you tack this onto an existing supplier information management (registration, onboarding, qualification) process, SPM data will contribute to a complete supplier management lifecycle.

Industry analysts have found that SPM is a meaningful and valuable addition to any business. A benchmark study by Aberdeen reported that among companies surveyed, implementing standard metrics and procedures for measuring supplier performance improved supplier performance by 26.6 percent on average. The areas of improvement came from quality, on-time delivery, price, total cost, contract compliance, lead times, and overall responsiveness. These improvements resulted in direct hard dollar savings or as improvements in responsiveness and service to end customers.

This is just one example to demonstrate that supplier performance management is a value adding activity for any organization. Whether you start big with a comprehensive SPM program, or small, with measuring a critical group of KPIs or suppliers, initiating SPM activities will put you on a path to making your supply base work for you in ways beyond simply providing a product or service. So, what are you waiting for?

Supplier Performance Management software provides the tools to collect, measure, analyze and report on supplier related KPI’s in one centralized and standardized system. [Total Supplier Manager](https://www.jaggaer.com/business-solutions/supplier-management/) incorporates SPM functionality to deliver a complete supplier lifecycle management solution.

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