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A3 Method: The A3 system is a means of describing a business process in a compact form. It was originally created by the Toyota Motor Corporation and was named for the paper size on which it was printed: A3 (11” x 17”). Toyota used the A3 methodology to help develop its famed Toyota Production System (TPS).

Abandonment: 1) The decision of a carrier to give up or to discontinue service over a route. Railroads must seek ICC permission to abandon routes. 2) As in the phrase "call abandonment". This refers to people who, being placed on hold in an incoming call, elect to hang up ("abandon") the call. Call centers monitor closely the "abandonment rate" as a measure of their inefficiency.

ABB: See Activity Based Budgeting

ABC: See Activity Based Costing

ABC Classification: A method of classifying inventory items relative to their impact on total control. ABC typically uses movement and cost data to calculate the value of stock usage over the prior period, and uses the result as an element in ranking items under an 80/20 Pareto rule for cycle counting purposes to focus efforts on those selected items and possible reduce the cost associated with frequent counting of slow moving items. The group is divided into classes called A, B, and C (and sometimes D) with The A group represents the highest value with 10 to 20% by number of items. The B, C and D (if used) groups are each lower values but typically higher populations. Items with higher usage value are (the 20%) are counted more frequently. Specific bars to be used in setting ABC levels will vary by organization as they will impact the financial control applied to inventory and the level of effort spent counting. Also see: Cycle Counting

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ABC Frequency of Access: Location method where the determination of a product's location within the warehouse, or distribution center, is based on 1) product's ABC Classification and 2) the number of times or rate of which the product is accessed.

ABC Inventory Control: A method of inventory control which divides items into categories based on value of usage, something like a Pareto division where the items which constitute the highest dollar value are tracked more closely than those with lower value movement. In this method an item with high volumes of movement, but low cost, such as a small cheap fastener would likely be counted less frequently than a slower mover which has a very high cost. Items are typically divided by a company defined set of values into "A", "B" and "C" groups, and sometimes a "D" group. The count frequencies are then applied to the groups. For example "A" class items may be counted weekly, "B" monthly, "C" quarterly, etc. as a part of a cycle counting program.

ABC Model: In cost management, a representation of resource costs during a time period that are consumed through activities and traced to products, services, and customers or to any other object that creates a demand for the activity to be performed.

ABC System: In cost management, a system that maintains financial and operating data on an organization's resources, activities, drivers, objects and measures. ABC models are created and maintained within this system.

Abnormal Demand: Demand for a product which is either greater or lower than expected by a given percentage which is determined by the organization. When observed, it should be determined whether it may be a one-time spike, or if the effect is part of a trend which should be considered during future forecasts.

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Absorption Costing: A cost accounting approach which captures overhead and other indirect costs as separate from unit costs for a given period, and then applies (absorbs) those costs into unit costs at the period end based on various factors such as movement and COGS elements.

Acceptable Quality Level (AQL): In quality assessment, acceptable quality level, also known as assured quality level, describes the maximum number of defects acceptable during the random sampling of an inspection.

Acceptable Sampling Plan: A quality management procedure which defines the sample sizes and acceptable defect levels for validating quality of products.

Acceptance Sampling: A statistical quality control method which tests samples of products at defined points as opposed to testing each product.

Accessibility: The ability of a carrier to provide service between an origin and a destination.

Accessorial Charges: A carrier's charge for accessorial services such as loading, unloading, pickup, and delivery.

Accessory: A choice or feature added to the good or service offered to the customer for customizing the end product. An accessory enhances the capabilities of the product but is not necessary for the basic function of the product. In many companies, an accessory means that the choice does not have to be specified before shipment but can be added at a later date. In other companies, this choice must be made before shipment.

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Accountability: The act of making a group or individual responsible for certain activities or outcomes. For example, managers and executives are accountable for business performance even though they may not actually perform the work.

Accounts Payable (A/P): 1) a financial term referring to the amount of transactions which have been accrued but not paid to a vendor. 2) An accounting function

Accounts Receivable (A/R): On a company's balance sheet, accounts receivable is the amount that customers owe to that company. Sometimes called trade receivables, they are classified as current assets assuming that they are due within one year.

Accreditation: The process in which certification of competency, authority, or credibility is presented. An example of accreditation is the accreditation of testing laboratories and certification specialists that are permitted to issue official certificates of compliance with established standards.

Accredited Standards Committee (ASC): A committee of the ANSI chartered in 1979 to develop uniform standards for the electronic interchange of business documents. The committee develops and maintains U.S. generic standards (X12) for Electronic Data Interchange.

Accumulation bin: An area where item to be used in assembly of a product are staged prior to work being done.

Accuracy: A value, usually expressed as a percentage, which expresses the level of precision incurred during transactions. An example would be seen when comparing actual inventory levels to what was expected from bookkeeping records.

LETTER A

Acknowledgment: Typically this is a response, either electronic or as a physical document, which confirms the receipt of an order from the supplier to the buyer.

Acquisition Categories (ACAT): U.S. DoD ACAT 1 programs are Milestone Decision Authority Programs or programs designated ACAT 1 by the Milestone Decision Authority.

Acquisition Cost: The net price plus other costs needed to purchase the item and get it to the point of use. These other costs can include: the item's purchasing costs (closing, research, accounting, commissions and legal fees), transportation, preparation and installation costs.

Action Message: A system message usually created during MRP calculations to call attention to a current or potential problem and suggest corrective action.

Action Plan: A specific method or process to achieve the results called for by one or more objectives. An action plan may be a simpler version of a project plan.

Activation: TOC recognizes that it is possible to produce without contributing to throughput. TOC defines production that contributes to throughput as utilization. Production that does not contribute to throughput is known as activation. Activation is not desired because it not only fails to increase throughput, but it also increases inventory and operating expense. This is consistent with the Just-In-Time (JIT) philosophy.

Active Inventory: Materials held in a facility which are intended to be consumed in manufacturing / assembly, or sold in a specified period.

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Active Stock: Goods in active pick locations and ready for order filling.

Activity: Work performed by people, equipment, technologies or facilities. Activities are usually described by the "action-verb-adjective-noun" grammar convention. Activities may occur in a linked sequence and activity-to-activity assignments may exist.

Activity Analysis: The process of identifying and cataloging activities for detailed understanding and documentation of their characteristics. An activity analysis is accomplished by means of interviews, group sessions, questionnaires, observations, and reviews of physical records of work.

Activity Based Budgeting (ABB): An approach to budgeting where a company uses an understanding of its activities and driver relationships to quantitatively estimate workload and resource requirements as part of an ongoing business plan. Budgets show the types, number of and cost of resources that activities are expected to consume based on forecasted workloads. The budget is part of an organization's activity-based planning process and can be used in evaluating its success in setting and pursuing strategic goals.

Activity Based Costing (ABC): A methodology that measures the cost and performance of cost objects, activities and resources. Cost objects consume activities and activities consume resources. Resource costs are assigned to activities based on their use of those resources, and activity costs are reassigned to cost objects (outputs) based on the cost objects proportional use of those activities. Activity-based costing incorporates causal relationships between cost objects and activities and between activities and resources.

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Activity-Based Management (ABM): A discipline focusing on the management of activities within business processes as the route to continuously improve both the value received by customers and the profit earned in providing that value. ABM uses activity-based cost information and performance measurements to influence management action.

Activity Based Planning (ABP): Activity-based planning (ABP) is an ongoing process to determine activity and resource requirements (both financial and operational) based on the ongoing demand of products or services by specific customer needs. Resource requirements are compared to resources available and capacity issues are identified and managed. Activity-based budgeting (ABB) is based on the outputs of activity-based planning.

Activity Dictionary: A listing and description of activities that provides a common/standard definition of activities across the organization. An activity dictionary can include information about an activity and/or its relationships, such as activity description, business process, function source, whether value-added, inputs, outputs, supplier, customer, output measures, cost drivers, attributes, tasks, and other information as desired to describe the activity.

Activity Driver: The best single quantitative measure of the frequency and intensity of the demands placed on an activity by cost objects or other activities. It is used to assign activity costs to cost objects or to other activities.

Activity Level: A description of types of activities dependent on the functional area. Product-related activity levels may include unit, batch, and product levels. Customer-related activity levels may include customer, market, channel, and project levels.

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Activity Network Diagram: An arrow diagram used in planning and managing processes and projects.

Actual Cost System: A managerial accounting system that records and measures all cost elements at their actual acquisition value. Indirect costs are then applied as overhead using a cost allocation technique.

Actual Costs: The actual labor, material, and allocated overhead costs incurred in the acquisition or production of a product.

Actual Demand: The known demand for a specific product based on customer orders and production orders which are open. Once an order is shipped or production is completed, specific demand quantity will become usage. Actual demand should be netted against any forecast for the same period, meaning that as orders are received they are considered to be part of an earlier forecast and forecasts should be considered as satisfied.

Actual to Theoretical Cycle Time: The ratio of the measured time required to produce a given output divided by the sum of the time required to produce a given output based on the rated efficiency of the machinery and labor operations.

Adaptive Smoothing: A special type of exponential smoothing that takes the success of previous forecasts into account when setting a value of ALPHA for the next period. In this manner, periods that experienced high error will cause ALPHA to be set high and, thus, adjust quickly. When error is low, AS assumes the technique is doing well and sets ALPHA at a low level. This makes ES much more responsive to changes in the level of the data and less reactive to noise. The advantage to adaptive smoothing is that the decision of what value of ALPHA to use in exponential smoothing is eliminated. A disadvantage to adaptive smoothing is that trend and seasonality are ignored.

LETTER A

Advance Material Request: A request for materials which is created in advance of formal need due to long lead times for components, etc.

Advanced Planning and Scheduling (APS): Refers to a manufacturing management process by which raw materials and production capacity are optimally allocated to meet demand. APS is especially well-suited to environments where simpler planning methods cannot adequately address complex trade-offs between competing priorities.

Advanced Shipping Notice (ASN): Detailed shipment information transmitted by the shipper to a customer or consignee in advance of delivery, designating the contents (individual products and quantities of each) and nature of the shipment. In EDI data standards this is referred to as an 856 transaction. May also include carrier and shipment specifics including time of shipment and expected time of arrival. The ASN data can be valuable in providing digital knowledge about what is in a shipment in a way that it can be used to eliminate manual data entry of each shipment.

Aftermarket: A market for parts and accessories used in the repair or enhancement of a product. A secondary market created after the original market sales are finished.

After-Sale Service: Services provided to the customer after products have been delivered. This can include repairs, maintenance and/or telephone support.

Agency tariff: A publication of a rate bureau that contains rates for many carriers.

Agent: An enterprise authorized to transact business for, or in the name of, another enterprise.

Agglomeration: A net advantage gained by a common location with other companies.

LETTER A

Aggregate Forecast: Forecasting of future demand for a family of products or for a single product across multiple dimensions of source - including planned production and customer orders.

Aggregate Inventory: The total inventory available for any given product across multiple locations and/or multiple stock-keeping units.

Aggregate Inventory Management: A method of managing inventory through the use of levels set against overall inventory or class value.

Aggregate Picking: A method common to operations which deliver via a direct to store route driver. In this situation the driver or picker will pull the aggregate number of products anticipated to be needed for a delivery run, and create crates or pallets of the same SKU, which the driver will pull from as needed for each stop on the route.

Aggregate Plan: A plan for the production process, 2 to 18 months in advance to give management an idea to of what quantity of materials and other resources are to be procured and when, so that the total cost of operations of the organization is kept to the minimum over that period.

Aggregate Planning: An operational activity which compiles an aggregate plan for the production process.

Aggregate Tender Rate: A reduced rate offered to a shipper who tenders two or more class-rated shipments at one time and one place.

LETTER A

Agile Manufacturing: Tools, techniques, and initiatives that enable a plant or company to thrive under conditions of unpredictable change. Agile manufacturing not only enables a plant to achieve rapid response to customer needs, but also includes the ability to quickly reconfigure operations-and strategic alliances-to respond rapidly to unforeseen shifts in the marketplace. In some instances, it also incorporates "mass customization" concepts to satisfy unique customer requirements. In broad terms, it includes the ability to react quickly to technical or environmental surprises.

Agility: The ability to rapidly and cost effectively adapt to market changes with no significant negative impact on quality or dependability.

Air Cargo: Refers to freight that is moved via air transportation.

Air Cargo Containers: Containers designed to conform to the inside of an aircraft. There are many shapes and sizes of containers. Air cargo containers fall into three categories: 1) air cargo pallets 2) lower deck containers 3) box type containers.

Air Taxi: An exempt for-hire air carrier that will fly anywhere on demand: air taxis are restricted to a maximum payload and passenger capacity per plane.

Air Transport Association of America: A U.S. airline industry association.

Air Waybill (AWB): A bill of lading for air transport that serves as a receipt for the shipper indicates that the carrier has accepted the goods listed. Acceptance obligates the carrier to carry the consignment to the airport of destination according to specified conditions.

Airport and Airway Trust Fund: A federal fund that collects passenger ticket taxes and disburses those funds for airport facilities.

LETTER A

Alaskan Carrier: A for-hire air carrier that operates within the state of Alaska.

Algorithm: A clearly specified mathematical process for computation; a set of rules, which, if followed, give a prescribed result.

All-cargo carrier: An air carrier that transports cargo only.

Allocated Item: A feature of an inventory control and order management system which allows for quantities available in inventory to be associated with a customer or production order so that the quantity cannot otherwise be used.

Allocation: 1) In cost accounting, a distribution of costs using calculations that may be unrelated to physical observations or direct or repeatable cause-and-effect relationships. Because of the arbitrary nature of allocations, costs based on cost causal assignment are viewed as more relevant for management decision-making. 2) In order management, allocation of available or incoming inventory to customer and production orders.

Allocation Costing: A method of allocating indirect / overhead costs to inventory items and costs of sales.

Alpha Release: A very early release of a product to get preliminary feedback about the feature set and usability.

Alternate Dispute Resolution (ADR): Any of a number of methods (such as mediation, arbitration, mock trials, etc) used to resolve disputes outside of litigation.

LETTER A

American Customer Satisfaction Index (ACSI): Released for the first time in October 1994, an economic indicator and cross industry measure of the satisfaction of U.S. household customers with the quality of the goods and services available to them-both those goods and services produced within the United States and those provided as imports from foreign firms that have substantial market shares or dollar sales. The ACSI is co-sponsored by the University of Michigan Business School, ASQ and the CFI Group.

American National Standards Institute (ANSI): A non-profit organization chartered to develop, maintain, and promulgate voluntary U.S. national standards in a number of areas, especially with regards to setting EDI standards. ANSI is the U.S. representative to the International Standards Organization (ISO).

American Society for Quality (ASQ): A professional organization with more than 100,000 members which advances learning, quality improvement, and knowledge exchange to improve business results, and to create better workplaces and communities worldwide.

American Society for Testing and Materials (ASTM): Not-for-profit organization that provides a forum for the development and publication of voluntary consensus standards for materials, products, systems and services.

American Society for Training and Development (ASTD): A membership organization providing materials, education and support related to workplace learning and performance.

American Society of Transportation & Logistics: A professional organization in the field of logistics.

LETTER A

American Standard Code for Information Interchange (ASCII): ASCII format - simple text based data with no formatting. ASCII is the standard code for information exchange among data processing systems. Uses a coded character set consisting of 7-bit coded characters (8 bits including parity check).

American Trucking Association, Inc. (ATA): A motor carrier industry association that is made up of sub conferences representing various sectors of the motor carrier industry.

American Waterway Operators: A domestic water carrier industry association representing barge operators on the inland waterways.

AMC: The US Air Force Air Mobility Command's mission is to provide global air mobility. The command also plays a crucial role in providing humanitarian support at home and around the world. AMC Airmen--active duty, Air National Guard, Air Force Reserve and Civil Reserve Air Fleet.

AMFC: Air Force Material Command conducts research, development, testing and evaluation, and provides the acquisition management services and logistics support necessary to keep Air Force weapon systems ready for war. The command develops, acquires and sustains the aerospace power needed to defend the United States and its interests for today and tomorrow.

Amtrak: The National Railroad Passenger Corporation, a federally created corporation that operates most of the United States' intercity passenger rail service.

Analysis of Variance (ANOVA): A statistical term that refers to a collection of statistical models which test the means of several groups to determine if the means are equal.

LETTER A

Andon: A manufacturing term referring to a signboard incorporating signal lights, audio alarms, and text or other displays installed at a workstation to notify management and other workers of a quality or process problem.

Animated GIF: A file that contains a series of GIF (Graphics Interchange Format) images that are displayed in rapid sequence by some Web browsers, giving an animated effect.

ANSI ASC X12: American National Standards Institute Accredited Standards Committee X12. The X12 committee of ANSI is charged with setting EDI standards.

ANSI Standard: A published transaction set approved by ANSI. The standards are reviewed every six months.

Anticipated Delay Report: A report, normally handwritten, which is created by the procurement and production areas to advise management regarding orders which are not expected to be completed on time.

Anticipation Inventories: Extra stocks of inventory which are being held above known requirement in order to accommodate trends or promotions. May also be used to hedge against risk of supply problems.

Anticipation Order: An order placed in advance of the availability of a product for delivery at a future date. Anticipation orders are frequently used in the retail environment where suppliers are previewing new products at trade shows and want to get a commitment from their retail customers prior to production of seasonal items.

LETTER A

Anti-Deficiency Act [Title 31, U.S. Code, Sec1341 & 1517]: Prohibits making or authorizing an obligation in excess of the amount available; forbids obligation to pay money from the US Treasury in advance of the appropriation; requires agency to fix responsibility for violations of the Act.

Anti-Dumping Duty: An additional import duty imposed in instances where imported goods are priced at less than the normal price charged in the exporter's domestic market and cause material injury to domestic industry in the importing country.

Any-quantity Rate (AQ): The same rate applies to any size shipment tendered to a carrier; no discount rate is available for large shipments.

Applicability Statement 2 (AS2): A specification for Electronic Data Interchange between businesses using the Internet's Web page protocol, the Hypertext Transfer Protocol (HTTP). The specification is an extension of the earlier version, Applicability Statement 1 (AS1). Both specifications were created by EDI over the Internet (EDIINT), a working group of the Internet Engineering Task Force (IETF) that develops secure and reliable business communications standards.

Application Service Provider (ASP): A company that offers access over the Internet to application (examples of applications include word processors, database programs, Web browsers, development tools, communication programs) and related services that would otherwise have to be located in their own computers. Sometimes referred to as "apps-on-tap", ASP services are expected to become an important alternative, especially for smaller companies with low budgets for information technology. The purpose is to try to reduce a company's burden by installing, managing, and maintaining software.

LETTER A

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LETTER A

Application-to-Application: The direct interchange of data between computers, without re-keying.

Appointment Freight: Shipments which are held at the carrier's terminal to be delivered at a specific date and time. Typically this occurs when a shipment is received by the carrier facility 1 or more days prior to the agreed upon delivery schedule. The shipment cannot immediately be delivered and must be held at the facility.

Approved Vendor List (AVL): List of the suppliers approved for doing business. The AVL is usually created by procurement or sourcing and engineering personnel using a variety of criteria such as technology, functional fit of the product, financial stability, and past performance of the supplier.

Army Corps of Engineers: A US federal agency responsible for the construction and maintenance or waterways.

Arrival Notice: A notice from the delivering carrier to the Notify Party indicating the shipment's arrival date at a specific location (normally the destination).

Arrow Diagram: A planning tool to diagram a sequence of events or activities (nodes) and the interconnectivity of such nodes. It is used for scheduling and especially for determining the critical path through nodes.

Artificial Intelligence: Understanding and computerizing the human thought process.

ASC X12: Accredited Standards Committee X12. A committee of ANSI chartered in 1979 to develop uniform standards for the electronic interchange of business documents.

LETTER A

Assemble-to-order: A strategy employed in production and light manufacturing environments where complete subassemblies and components are assembled into a finished product just prior to customer shipment.

Assembly: A collection of components which have been put together into a unit or the activity involved with putting components together to form a unit.

Assembly Line: A manufacturing process where products are completed from components as a result of a series of continuous activities. Henry Ford is widely recognized as the father of the assembly line.

Assignment: A distribution of costs using causal relationships. Because cost causal relationships are viewed as more relevant for management decision-making, assignment of costs is generally preferable to allocation techniques.

Association of American Railroads: A railroad industry association that represents the larger U.S. railroads.

Assumed Receipt: The principle of assuming that the contents of a shipment are the same as those presented on a shipping or delivery note. Shipping and receiving personnel do not check the delivery quantity. This practice is used in conjunction with bar codes and an EDI-delivered ASN to eliminate invoices and facilitate rapid receiving.

Assured Source of Supply: A guaranteed supply source usually designated by a contractual agreement.

Asynchronous Process: A situation where two related processes are started and run concurrently without waiting for the other to complete.

LETTER A

Atomic: Refers to the lowest level of division for a process, product structure, network, etc. Atomic elements cannot typically be sub-divided. In a process this refers to a unique activity, in a product structure this would be a single part component; in a network this could represent a single warehouse or location.

Attachment: A piece of equipment which is typically sold as an optional separate unit and may be combined with the main product at the factory or in the field.

Attributes: A label used to provide additional classification or information about a resource, activity, or cost object. Used for focusing attention and may be subjective. Examples are a characteristic, a score or grade of product or activity, or groupings of these items, and performance measures.

Audit: The inspection and examination of a process, financial results, or quality system to ensure compliance to requirements. An audit can apply to an entire organization or may be specific to a function, process or production step.

Audit Trail: Manual or computerized tracing of the transactions affecting the contents or origin of a record.

Auditability: A characteristic of modern information systems, gauged by the ease with which data can be substantiated by trading it to source documents and the extent to which auditors can rely on pre-verified and monitored control processes.

Auditing: Determining the correct transportation charges due the carrier: auditing involves checking the accuracy of the freight bill for errors, correct rate, and weight. Also refers to the act of performing an audit of processes or financial results.

LETTER A

Authentication: 1) The process of verifying the eligibility of a device, originator, or individual to access specific categories of information or to enter specific areas of a facility. This process involves matching machine-readable code with a predetermined list of authorized end users. 2) A practice of establishing the validity of a transmission, message, device, or originator, which was designed to provide protection against fraudulent transmissions.

Authentication Key: A short string of characters used to authenticate transactions between trading partners.

Autodiscrimination: The functionality of a bar code reader to recognize the bar code symbology being scanned thus allowing a reader to read several different symbologies consecutively

AutoID: Referring to an automated identification system. This includes technology such as bar coding and radio frequency tagging (RFID which use scanners or readers to determine the identity of an item by comparing the code to a database).

Automated Broker Interface (ABI): The U.S. Customs program to automate the flow of customs-related information among customs brokers, importers, and carriers.

Automated Call Distribution (ACD): A feature of large call center or "Customer Interaction Center" telephone switches that routes calls by rules such as next available employee, skill-set etc.

LETTER A

Automated Clearinghouse (ACH): A nationwide electronic payments system, which more than 15,000 financial institutions use, on behalf of 100,000 corporations and millions of consumer in the U.S. The funds transfer system of choice among businesses that make electronic payments to vendors; it is economical and can carry remittance information in standardized, computer processable data formats.

Automated Commercial Environment (ACE): Update of outmoded Automated Commercial System (ACS). It is intended to provide automated information system to enable the collection, processing and analysis of commercial import and export data, allowing for moving goods through the ports faster and at lower cost, as well as detection of terrorist threats.

Automated Guided Vehicle System (AGVS): A system for material handling equipment which uses wired or wireless guidance to move materials around facilities based on system commands.

Automated Manifest System (AMS): A multi-modular cargo inventory control and release notification system through which carriers submit their electronic cargo declaration 24 hours before loading.

Automated Storage/Retrieval System (AS/RS): An inventory storage system which uses un-manned vehicles to automatically perform stock put-away and picking actions.

Automatic Relief: An accounting method where bookkeeping is performed either as a result of completed or pending activities.

Available Inventory: Also called net inventory, this is the quantity of stock which is available to use after considering allocations, reservations, backorders, and quantities set aside to compensate for quality problems.

LETTER A

Available to Promise (ATP): The quantity of a product which is or will be available to promise to a customer based on their required shipment date. ATP is typically 'time phased' to allow for promising delivery at a future date based on anticipated purchase or production receipts.

Available to Sell (ATS): Total quantity of goods committed to the pipeline for a ship to or selling location. This includes the current inventory at a location and any open purchase orders.

Average Annual Production Materials Related A/P (Accounts Payable): The value of direct materials acquired in that year for which payment has not yet been made. Production-related materials are those items classified as material purchases and included in the Cost of Goods Sold (COGS) as raw material purchases.

Average Cost per Unit: The average cost of stock of any given item based on having incurred different costs for each time a receipt was processed. Usually calculated at the time of a new receipt by multiplying old inventory quantity by old avg. cost, then adding the received count and total cost, and then dividing the new total cost by the new inventory quantity.

Average Inventory: The average inventory level over a period of time. Implicit in this definition is a "sampling period" which is the amount of time between inventory measurements. For example, daily inventory levels over a two-week period of time, hourly inventory levels over one day, etc. The average inventory for the same total period of time can fluctuate widely depending upon the sampling period used.

LETTER A/B

Average Payment Period (for materials): The average time from receipt of production-related materials and payment for those materials. Production-related materials are those items classified as material purchases and included in the Cost of Goods Sold (COGS) as raw material purchases. (An element of Cash-to-Cash Cycle Time)

Avoidable Cost: part of the cost of any activity associated with an output that could be saved by not performing that activity.

Award Fee: Based on subjective assessment by Government on how well contractor meets/exceeds performance standards.

Back-Charged: 1) A payment credited to a company's account for not performing based on contract terms, and 2) An amount charged to a contractor for materials, equipment, services, or other charges which were paid by the owner and furnished to the contractor.

Back Order: Product which has been ordered by a customer but out of stock and promised to ship when the product becomes available.

Back Scheduling: A technique used to calculating activities based on a series of known activities, the time required to complete them, and the desired end date for completing the series.

Backflush: A method used to relieve inventory and charge costs based on completed units. An alternative to processing actual issue or labor transactions related to production. Typically a bill of materials is used to determine the quantity required to build a product, and relief is based on quantity required per time units complete. It works well in environments where the time spent in WIP is short; otherwise the delay in recording book on hand can cause problems with inventory control.

LETTER B

Backhaul: The portion of a transport trip typically associated with trucking, which is incurred when returning a vehicle to its point of origin. Ideally the carrier with find some sort of freight to carry back, if the trip is empty it is called deadhead.
See also: *Deadhead*

Backlog Customer: Customer orders received but not yet shipped; also includes backorders and future orders.

Backorder: 1) The act of retaining a quantity to ship against an order when other order lines have already been shipped. Backorders are usually caused by stock shortages. 2) The quantity remaining to be shipped if an initial shipment(s) has been processed. Note: In some cases backorders are not allowed, this results in a lost sale when sufficient quantities are not available to completely ship and order or order line.
See also: *Balance to Ship*

Backsourcing: The process of recapturing and taking responsibility internally for processes that were previously outsourced to a contract manufacturer, fulfillment or other service provider. Backsourcing typically involves the cancellation or expiration of an outsourcing contract and can be nearly as complex as the original outsourcing process.

Balance of Trade: The surplus or deficit which results from comparing a country's exports and imports of merchandise only.

Balance to Ship (BTS): Balance or remaining quantity of a promotion or order that has yet to ship.

LETTER B

Balanced Scorecard: A strategic performance management tool used for measuring whether the smaller-scale operational activities of a company are aligned with its larger-scale objectives in terms of vision and strategy By focusing not only on financial outcomes but also on the operational, marketing and developmental inputs to these, the Balanced Scorecard helps provide a more comprehensive view of a business, which in turn helps organizations act in their best long-term interests.

Banned Forecast: Forecasting future demand in "Bands" which may include a high-confidence forecast (for products the manufacturer is very certain the market will need); a medium-confidence forecast (often the "one number" consensus forecast); and a low-confidence forecast (a high demand scenario). In this case, a manufacturer can safely make the high confidence forecast units early in the month, and then produce the medium-confidence forecast units later in the month, unless they see a drastic drop-off in orders. Only if they see an unexpected surge of demand does the manufacturer ramp up the factory in the last week of the month. In the semiconductor industry, adding capacity is expensive. These banded probabilistic ("stochastic") forecasts make a lot of sense and can improve the S&OP process.

Bar Code: A symbol consisting of a series of printed bars representing values. A system of optical character reading, scanning, and tracking of units by reading a series of printed bars for translation into a numeric or alphanumeric identification code. A popular example is the UPC code used on retail packaging.

Bar code scanner: A device to read bar codes and communicate data to computer systems.

Barge: The cargo-carrying vehicle used primarily by inland water carriers. The basic barges have open tops, but there are covered barges for both dry and liquid cargoes.

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Barrier to Entry: Reasons that companies perceive will stop them from participating in a particular market. These include cost of entry, significant competition, limited knowledge, etc.

Base Demand: The level of demand for a product which is based on actual history and / or known customer contracts.

Base Stock System: An inventory system in which a replenishment order is issued each time a withdrawal is made, and the order quantity s equal to the amount of the withdrawal. . This type of system is also referred to as a par- stock system (bringing stock back to par level).

Baseline: A basis for comparison set by monitoring the initial performance of a process. The baseline is used as a reference point to evaluate performance improvement efforts.

Basing Point Pricing: A pricing system that includes transportation cost from a particular city or town in a zone or region even though the shipment does not originate at the basing point.

Basis Point (BPS): A basis point is a unit that is equal to 1/100th of 1%, and is often used instead of percentages when discussing interest rates, rates of return, and other percentage-based performance metrics that can occur as fractions of a percent. 1% change = 100 basis points, and 0.01% = 1 basis point.

Batch Control Totals: The result of grouping transactions at the input stage and establishing control totals over them to ensure proper processing. These control totals can be based on document counts, record counts, quantity totals, dollar totals, or hash (mixed data, such as customer AR numbers) totals.

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Batch Number: A sequence number associated with a specific batch or production run of products and used for tracking purposes.

Batch Picking: An order picking method where orders are grouped into small batches by item, an order picker will pick all of a given item for all orders within the batch in one pass. The picked items are later sorted by order for shipment. Batch picking is usually associated with pickers with multi-tiered picking carts moving up and down aisles picking batches of usually 4 to 12 orders. Batch picking is also very common when working with automated material handling equipment such as carousels.

Batch Processing: A computer term which refers to the processing of computer information after it has been accumulated in one group, or batch. This is the opposite of “real-time” processing where transactions are processed in their entirety as they occur.

Batch Release: Orders are released to be fulfilled or picked at specific times during the course of a day. Accumulation of the orders before release results in a batch.

Baud: A computer term describing the rate of transmission over a channel or circuit. The baud rate is equal to the number of pulses that can be transmitted in one second, often the same as the number of bits per second. Common rates are now 1200, 2400, 4800, 9600 bits and 19.2 and 56 kilobytes (Kbs) for "dial-up" circuits, and may be much higher for broadband circuits.

Belly Cargo: Air freight carried in the belly of passenger aircraft.

Benchmark: A measure, reference or standard for comparison; this performance level is recognized as the standard of excellence or target for a specific business process. Any metric which is being used to compare actual performance against.

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Benchmarking: The process of comparing performance against the practices of other leading companies for the purpose of improving performance. Companies also benchmark internally by tracking and comparing current performance with past performance. Benchmarking seeks to improve any given business process by exploiting "best practices" rather than merely measuring the best performance. Best practices are the cause of best performance. Studying best practices provides the greatest opportunity for gaining a strategic, operational, and financial advantage.

Benefit-cost ratio: An analytical tool used in public planning; a ratio of total measurable benefits divided by the initial capital cost.

Bespoke: An individual or custom-made product or service. Traditionally applied to custom-tailored clothing, the term has been extended to information technology, especially for custom-designed software as an alternative to commercial (COTS) software.

Best-in-Class: An organization, usually within a specific industry, recognized for excellence in a specific process area.

Best Practice: A specific process or group of processes which have been recognized as the best method for conducting an action. Best Practices may vary by industry or geography depending on the environment being used. Best practices methodology may be applied with respect to resources, activities, cost object, or processes.
Note: *Best practices which are generally available from any source should be analyzed to determine their applicability to a given situation before being used as a guideline or benchmark.*

Beta release: A pre-released version of a product that is sent to customers for evaluation and feedback.

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Big Data: Refers to the accumulated data contained in multiple databases across an organization, or even extending to some supply chain partners. Separate databases may exist to support a variety of individual business processes, making analysis of that data quite difficult in any consolidated manner. The term Big Data is generally used when discussing how to do a consolidated analysis, or the difficulty of consolidating multiple databases.

Bilateral Contract: An agreement in which each of the parties to the contract makes a promise or promises to the other party.

Bill of Activities: A listing of activities required by a product, service, process output or other cost object. Bill of activity attributes could include volume and or cost of each activity in the listing.

Bill of Lading (BOL): A transportation document that is the contract of carriage containing the terms and conditions between the shipper and carrier.

Bill of Lading, Through: A bill of lading that covers goods from point of origin to final destination, when interchange or transfer from one carrier to another is necessary to complete the journey.

Bill of Material (BOM): A structured list of all the materials or parts and quantities needed to produce a particular finished product, assembly, subassembly, or manufactured part, whether purchased or not.

Bill of Material Accuracy: Conformity of the list of specified items to administrative specifications, with all quantities correct.

Bill of Resources: A listing of resources required by an activity. Resource attributes could include cost and volumes.

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Bin: An inventory location which is typically a box or tray used to hold quantities of smaller parts.

Bin Location: A generic term which may be used to identify the actual physical location where a product is stored.

Binary: A computer term referring to a system of numerical notation that assumes only two possible states or values, zero (0) and one (1). Computer systems use a binary technique where an individual bit or "Binary Digit" of data can be "on" or "off" (1 or 0). Multiple bits are combined into a "Byte" which represents a character or number.

Bisynchronous: A computer term referring to a communication protocol whereby messages are sent as blocks of characters. The blocks of data are checked for completeness and accuracy by the receiving computer.

Bitmap Image (BMP): The standard image format on Windows-compatible computers. Bitmap images can be saved for Windows or OS/2 systems and support 24-bit color.

Blanket Purchase Order: A blanket order is defined as an order the customer makes with its supplier which contains multiple delivery dates scheduled over a period of time, sometimes at predetermined prices. It is normally used when there is a recurring need for expendable goods. Hence, items are purchased under a single purchase order (P.O) rather than processing a separate P.O. each time supplies are needed.

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Blanket Purchasing Agreement (BPA): A US Government Service Administration buying schedule for buyers and sellers which denotes not only that prices have already been determined to be fair and reasonable but goes a step further by determining the terms under which goods and services will be provided and possibly establishing a single source to deliver them over a period of time.

Blanket Release: An authorization, similar to a purchase request, which is used to confirm a customer's agreement to produce or deliver products identified in an earlier blanket P.O. agreement or contract.

Blanket Rate: A rate that does not increase according to the distance the commodity is shipped.

Bleeding Edge: An unproven process or technology so far ahead of its time that it may create a competitive disadvantage.

Block diagram: A diagram of a system, in which the principal parts or functions are represented by blocks connected by lines that show the relationships of the blocks. The block diagram is typically used for a higher level, less detailed description aimed more at understanding the overall concepts and less at understanding the details of implementation.

Block Stacking: A storage method which uses no formal racking or shelves to contain the products. Items to be stored (pallets, cases or cartons) are stacked upwards from the floor surface to whatever height is practical.

Blocking bug: A defect that prevents further or more detailed analysis or verification of a functional area or feature, or any issue that would prevent the product from shipping.

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Blow Through: An MRP process which uses a "phantom bill of material" and permits MRP logic to drive requirements straight through a higher level "phantom item" to its components. The MRP system usually retains its ability to net against any occasional inventories of the item.

Body of knowledge (BOK): The prescribed aggregation of knowledge in a particular area an individual is expected to have mastered to be considered or certified as a practitioner.

Bomb Bay Sorter: A type of sortation system which allows for selectively dropping goods into boxes or bags associated with specific orders or destinations. Conveyors move the goods above the target box/bag locations which are fixed, releasing the goods via a tilt-tray type of device or directly into the target.

Bona Fide Need Rule: Requires funds to be used only for needs or services in the year of the appropriations obligation period.

Bonded Warehouse: Warehouse approved by the Customs or Treasury Department and under bond/guarantee for observance of revenue laws. Used for storing goods until duty is paid or goods are released in some other proper manner. In many cases the bonded warehouse is a building adjacent to the main warehouse, or a separate secure area within the main warehouse. Incoming goods should be received to this location as usual, but flagged as in quarantine or quality hold.

Book Inventory: An accounting term used to refer to the value or quantity of inventory shown in the company's accounting 'books" such as an inventory control database or the general ledger. Book inventory is compared to physical inventory during audit processes for validation and to determine any variances.

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Bookings: The sum of the value of all orders received (but not necessarily shipped), net of all discounts, coupons, allowances, and rebates.

Bottleneck: A constraint, obstacle or planned control that limits throughput or the utilization of capacity.

Bottom-up Replanning: A manual technique of resource planning that allows the user to interact with the system at much low levels of detail using disaggregated demand and supply orders and tracing the demand of a lower level component to higher level assemblies and products.

Bounce Back: The practice of sending another identical (or similar) catalog back to someone who has just ordered something from one of your catalogs.

Box-Jenkins Model: In time series analysis, the Box–Jenkins methodology applies autoregressive moving average models to find the best fit of a time series to past values of this time series, in order to make forecasts.
See also: Forecast

Boxcar: An enclosed rail car typically 40 to 50 feet long; used for packaged freight and some bulk commodities.

Bracing: Securing a shipment inside a carrier's vehicle to prevent damage.

Bracketed Recall: RA method of performing product recalls where a range of known lot numbers is expanded on the front and back end in order to capture any risk.

Branding: The act of assigning a name or image to a product in such a way that consumers will associate one with the other. Branding typically includes doing background research to ensure that the name can be trademarked and is not currently in use by another company for a similar product.

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Breadman: A specific application of Kanban, used in coordinating vendor replenishment activities. In making bread or other route type deliveries, the deliveryman typically arrives at the customer's location and fills a designated container or storage location with product. The size of the order is not specified on an ongoing basis, nor does the customer even specify requirements for each individual delivery. Instead, the supplier assumes the responsibility for quantifying the need against a prearranged set of rules and delivers the requisite quantity.

Break-Bulk: The separation of a single consolidated bulk load into smaller individual shipments for delivery to the ultimate consignees. This is preceded by a consolidation of orders at the time of shipment, where many individual orders which are destined for a specific geographic area are grouped into one shipment in order to reduce cost.

Break-Even Chart: A graphical tool used to chart the “break-even point” – the point where the total sales revenue axis line intersects with total cost axis line. Sales revenue, variable and fixed costs are plotted on the vertical axis while volume is plotted on the horizontal axis.

Break-Even Point: A chart which graphically represents the point at which cost or expenses and revenue are equal: there is no net loss or gain, and one has "broken even".

Bricks and Mortar: The act of selling through a physical location. The flip side of clicks and mortar, where selling is conducted via the Internet. An informal term for representing the old economy versus new economy or the Industrial economy versus information economy.

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Broadband: A high-speed, high-capacity transmission channel. Broadband channels are carried on radio wave, coaxial or fiber-optic cables that have a wider bandwidth than conventional telephone lines, giving them the ability to carry video, voice, and data simultaneously.

Broken case: An open case. The term is often used interchangeably with "repack" or "less-than-full-case" to name the area in which materials are picked in that form.

Broker: An intermediary between the shipper and the carrier. The broker arranges transportation for shippers and represents carriers.

Brokered Systems: Independent computer systems, owned by independent organizations or entities, linked in a manner to allow one system to retrieve information from another. For example, a customer's computer system is able to retrieve order status from a supplier's computer.

Browser: A utility that allows an internet user to look through collections of things. For example, Netscape Navigator and Microsoft Explorer allow you to view contents on the World Wide Web.

Bucket-brigade Picking: A way of organizing workers on a pick line so that the line balances itself. Each worker starts down a pick line, at the speed they can accomplish given their skill and the difficulty of the next pick. When the last worker finishes his pick at the end of the pick line, he or she walks back upstream to take over the work of their predecessor, who walks back and takes over the work of his or her predecessor and so on.

Bucketed System: A technique used in requirements planning where available resources are represented in buckets – typically weekly or monthly periods – showing a beginning balance, anticipated supply and demand for the period and the calculated forecast availability.

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Bucketless system: A technique used in requirements planning where available resources are calculated on demand using a beginning balance and known or planned supply and demand for the period.

Buffer: The level of merchandise / goods to be stocked as needed to accommodate regular sales orders, taking into consideration low and peak periods.

Buffer Management: A technique used in theory of constraints (TOC) based management systems to overcome shortages and idle constraints.

Buffer Stock: See *Safety Stock*

Bulk area: A storage area for large items which at a minimum are most efficiently handled by the pallet load.

Bulk Packing: The process or act of placing numbers of small cartons or boxes into a larger single box to aid in the movement of product and to prevent damage or pilferage to the smaller cartons or boxes.

Bulk Storage: The process of housing or storing materials and packages in larger quantities, generally using the original packaging or shipping containers or boxes.

Bulletin Board: An electronic forum that hosts posted messages and articles related to a common subject.

Bullwhip Effect: Also known as “Whiplash Effect” it is an observed phenomenon in forecast-driven distribution channels. The oscillating demand magnification upstream a supply chain is reminiscent of a cracking whip. The concept has its roots in J Forrester's Industrial Dynamics (1961) and thus it is also known as the Forrester Effect.

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Bundle: A group of products that are shipped together as an unassembled unit.

Bundling: An occurrence where two or more products are combined into one transaction for a single price.

Burn Rate: The rate of consumption of cash in a business. Burn rate is used to determine cash requirements on an on-going basis. A burn-rate of $50,000 would mean the company spends $50,000 a month above any incoming cash flow to sustain its business. Entrepreneurial companies will calculate their burn-rate in order to understand how much time they have before they need to raise more money, or show a positive cash flow.

Business Activity Monitoring (BAM): A term which refers to capturing operational data in real-time or close to it, making it possible for an enterprise to react more quickly to events. This is typically done through software and includes features to provide alerts / notifications when specific events occur.
See also: *Supply Chain Event Management*

Business Application: Any computer program, set of programs, or package of programs created to solve a particular business problem or function.

Business Continuity Plan (BCP): A defined operational plan which is designed to be implemented in the event of disruption of normal operations. Disruptions may be the result of natural disasters, civil or labor unrest, etc. CSCMP provides suggestions for helping companies do continuity planning in their Securing the Supply Chain Research.

Business Intelligence: The set of skills, technologies, applications and practices used to help a business acquire a better understanding of its commercial context to make better business decisions.

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Business Logistics: The systematic and coordinated set of activities required to provide the physical movement and storage of goods (raw materials, parts, finished goods) from vendor/supply services through company facilities to the customer (market) and the associated activities-packaging, order processing, etc.-in an efficient manner necessary to enable the organization to contribute to the explicit goals of the company.

Business Plan: A formal statement of a set of business goals, the reasons why they are believed attainable, and the plan for reaching those goals. It may also contain background information about the organization or team attempting to reach those goals.

Business Performance Measurement (BPM): A technique which uses a system of goals and metrics to monitor performance. Analysis of these measurements can help businesses in periodically setting business goals, and then providing feedback to managers on progress towards those goals. A specific measure can be compared to itself over time, compared with a preset target or evaluated along with other measures.

Business Process Outsourcing (BPO): The practice of outsourcing non-core internal functions to third parties. Functions typically outsourced include logistics, accounts payable, accounts receivable, payroll and human resources. Other areas can include IT development or complete management of the IT functions of the enterprise.

Business Process Reengineering (BPR): The fundamental rethinking and oftentimes, radical redesign of business processes to achieve dramatic organizational improvements.

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Business Reviews (BRs): A periodic assessment of the commercial context of a business, its mission statement, goals and strategic plan. Reviews are typically held each quarter of the calendar year and are attended by senior managers of functional areas from both supplier and customer organizations.

Business-to-Business (B2B): As opposed to business-to-consumer (B2C). Many companies are now focusing on this strategy, and their sites are aimed at businesses (think wholesale) and only other businesses can access or buy products on the site. Internet analysts predict this will be the biggest sector on the Web.

Business-to-Consumer (B2C): The hundreds of e-commerce Web sites that sell goods directly to consumers are considered B2C. This distinction is important when comparing Websites that are B2B as the entire business model, strategy, execution, and fulfillment is different.

Business Unit: A part of an organization which is managed like a separate business with its own profit and loss financial reporting. For example, in the General Motors group Chevrolet is a business unit.

Buyer Behavior: The mannerisms inherent in how a business or individual acts during the purchasing process.

Buying Cards (P-Cards): Basically these are a form of credit card used to make maintenance, repair, and operating (MRO) inventory type purchases verses using a purchase order (PO) that can cost more to process for small purchases. Companies using these cards typically work with card issuers to develop guidelines for use—sometimes by value limits and type of expense—which provide control over authorized purchases at the point of sale.

LETTER B/C

Byte: A computer term used to define a string of 7 or 8 bits, or binary digits. The length of the string determines the amount of data that can be represented. The 8-bit byte can represent numerous special characters, 26 uppercase and lowercase alphabetic characters, and 10 numeric digits, totaling 256 possible combinations.

Cabotage: A federal law that requires coastal and inter-coastal traffic to be carried in U.S.-built and -registered ships.

Cage: (1) A secure enclosed area for storing highly valuable items, (2) a pallet-sized platform with sides that can be secured to the tines of a forklift and in which a person may ride to inventory items stored will above the warehouse floor.

CAGE Code: The Commercial and Government Entity code is a 5 character (number and letters) code used to identify contractors doing business with the U.S. Government.

Caged: Referring to the practice of placing high-value or sensitive products in a fenced off area within a warehouse.

Calendar Days: The conversion of working days to calendar days is based on the number of regularly scheduled workdays per week in your manufacturing calendar. To convert from working days to calendar days: If work week:

Call Center: A call center is a centralized office used for the purpose of receiving and transmitting a large volume of requests by telephone. A call centre is operated by a company to administer incoming product support or information inquiries from consumers. Outgoing calls for telemarketing, clientele, product services, and debt collection are also made. In addition to a call centre, collective handling of letters, faxes, live chat, and e-mails at one location is known as a contact center.

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Call-off Orders: A strategy to delay delivery of items that are not needed immediately. Instead, you "call off" the items from the purchase order you want as you need them.
See also: *Blanket Purchase Order*

Call Volume: The number of telephone calls made or received over a specific period of time.

Can-order Point: A supplier ordering method where multiple items from the same vendor are considered / reviewed if any one item from that vendor falls below a specific order point (either set or calculated). Once an item triggers an order, any other items which are near their order point are also considered. This is done to prevent multiple orders for a single vendor in a short time frame, allowing for possible price breaks and shipping discounts.

Cantilever Rack: Racking system that support columns at the rear and arms which attach to the support columns to hold shelving or stock. Cantilevers racks allows for storage of very long items such as pipes or steel rods.

Capable to Promise (CTP): A technique similar to Available-to-Promise, it uses the availability of individual components to determine if an end item can be configured and assembled by a customer-given request date and provides the ability of adjusting plans due to inaccurate delivery date promises. Capable to promise looks at both materials and labor/machine requirements.

Capability maturity model (CMM): A framework that describes the key elements of an effective software process. It's an evolutionary improvement path from an immature process to a mature, disciplined process. The CMM covers practices for planning, engineering and managing software development and maintenance. When followed, these key practices improve the ability of organizations to meet goals for cost, schedule, functionality and product quality.

LETTER C

Capacity: The physical facilities, personnel and process available to meet the product or service needs of customers. Capacity generally refers to the maximum output or producing ability of a machine, a person, a process, a factory, a product, or a service, or to the maximum amount of space available such as warehouse storage capacity.

Capacity Management: The concept that capacity should be understood, defined, and measured for each level in the organization to include market segments, products, processes, activities, and resources. In each of these applications, capacity is defined in a hierarchy of idle, non-productive, and productive views.

Capacity Planning: Assuring that needed resources (e.g., manufacturing capacity, distribution center capacity, transportation vehicles, etc.) will be available at the right time and place to meet logistics and supply chain needs.

CAPEX: A term used to describe the monetary requirements (CAPital EXPenditure) of an initial investment in new machines or equipment.

Capital: The resources, or money, available for investing in assets that produce output.

Car supply charge: A railroad charge for a shipper's exclusive use of special equipment.

Carbon Footprint: A measure of the total carbon emissions for a given person, organization, building, operation etc. and the impact their carbon emissions have on the environment by relating the amount of greenhouse gases produced to such activities as burning fossil fuels for electricity, heating transportation, etc.

LETTER C

Carbon Trade: The process of buying and selling credits to emit carbon. Companies and organizations are assigned emission permits that stand for the amount of carbon they are allowed to emit. If a company or organization emits less carbon, then it can sell its emissions permits. If emissions are more than its current permits, then it will need to buy emission permits from other companies or organizations that produce less carbon.

Cargo: subject of a shipment. The materials being carried.

Carload Lot: A shipment of not less than five tons of one commodity.

Carmack Amendment: An Interstate Commerce Act amendment that delineates the liability of common carriers and the bill of lading provision.

Carousel: Automated warehousing equipment generally used for picking of small and high-volume parts/pieces. Carousel bins are typically in sections which rotate in a loop to bring the goods to the picker, or for putaway. The loop may be horizontal (runs front to back) or vertical (runs up or down).

Carriage and Insurance Paid To (CIP): This term is used primarily for multimodal moves and is the same as CPT, except the seller must also purchase cargo insurance in the buyer's name.

Carriage Paid To (CPT): Similar to CIF, except that the buyer pays for insurance. The seller, however, is responsible for export clearance.

Carrier: A firm which transports goods or people via land, sea or air.

Cartel: A group of organizations which would normally be considered competitive, but who instead have an agreement to cooperate in an area of endeavor in an effort to improve the position of the group.

LETTER C

Cartonization: The process of putting small box shipments into a lager carton, also called over packing or strapping cases together.

Cascade Tendering: Loads are electronically submitted to the carrier who submitted the lowest rate on that shipping lane (origin zip code to destination zip code)

Case Code: The UPC number for a case of product. The UPC case code is different from the UPC item code because it uses the case identifier as an extended part of the number. This is sometimes referred to as the "Shipping Container Symbol" or ITF-14 code.

Case Pack: codeThe number of individual products (eaches or retail boxes) contained in an outer case.

Cash-to-Cash Cycle Time: The time it takes for cash to flow back into a company after it has been spent for raw materials.

Cash Conversion Cycle: Typically the length of time from the purchase of raw materials to the collection of payment from customers. In retail settings it may refer to the length of time from sales to payment receipt.

Catalog Channel: A call center or order processing facility that receives orders directly from the customer based on defined catalog offerings and ships directly to the customer.

Catalog Item (CI): The item as it is stored in a catalog or data pool. In the Global Data Synchronization Network the catalog item is uniquely identified by (GTIN + GLN + Target Market).

LETTER C

Categorical Plan: A method of categorizing purchased materials and suppliers based on product type, using departments or functional area. Plans are used to evaluate suppliers in groups.
See also: *Weighted-Point Plan*

Category: Refers to a group of products or services which share a common set of characteristics. A single product could belong to multiple categories, for example detergents could be included in 'Household Cleaning', "Non- Grocery" and "Liquid". Categories are typically used to analyze consumer usage or warehouse zoning.

Category Management: The management of product categories as strategic business units. The practice empowers a category manager with full responsibility for the assortment decisions, inventory levels, shelf-space allocation, promotions and buying. With this authority and responsibility, the category manager is able to judge more accurately the consumer buying patterns, product sales and market trends of that category.

Cause and Effect Diagram: In quality management, a structured process used to organize ideas into logical groupings. Used in brainstorming and problem solving exercises. Also known as Ishikawa or fish bone diagram.

Cell: An area of manufacturing or assembly which consists of a series of work units devoted to the manufacture of a specific product. Cellular manufacture is an alternative to the traditional production line.

LETTER C

Cellular manufacturing: A manufacturing approach in which equipment and workstations are arranged to facilitate small-lot, continuous-flow production. In a manufacturing "cell," all operations necessary to produce a component or subassembly are performed in close proximity, thus allowing for quick feedback between operators when quality problems and other issues arise. Workers in a manufacturing cell typically are cross-trained and, therefore, able to perform multiple tasks as needed.

Center-of-Gravity Approach: A supply chain planning methodology for locating distribution centers at approximately the location representing the minimum transportation costs between the plants, the distribution centers, and the markets.

Centralized Authority: Management authority to make decisions is restricted to few managers.

Centralized Dispatching: An organizational strategy and structure where all workflow is controlled from a single location or group. Dispatching can consist of production orders as well as inbound /outbound shipments of goods.

Centralized Inventory Control: An organizational strategy and structure where all inventoried items are controlled from a single location or group.

Certificate of Analysis (COA): A document, often required by an importer or governmental authorities, attesting to the quality or purity of commodities.

Certificate of Compliance: A document, often required by an importer or governmental authorities, attesting to the quality or purity of commodities. The origin of the certification may be a chemist or any other authorized body such as an inspection firm retained by the exporter or importer.

LETTER C

Certificate of Origin: An international business document that certifies the country of origin of the shipment.

Certificate of public convenience and necessity: The grant of operating authority that is given to common carriers. A carrier must prove that a public need exists and that the carrier is fit, willing, and able to provide the needed service. The certificate may specify the commodities to be hauled, the area to be served, and the routes to be used.

Certificated carrier: A for-hire air carrier that is subject to economic regulation and requires an operating certification to provide service.

Certified Supplier: A supplier who has demonstrated the ability to consistently meet established quality, cost, delivery, financial, and count objectives, and has therefore been awarded the “certified” designation. Suppliers in this group may be able to bypass incoming quality inspection.

Chain of Customers: The downstream supply chain in situations where multiple echelons exist such as manufacturer to distributor to retailer to end user.

Chain reaction: A chain of events described by W. Edwards Deming: improve quality, decrease costs, improve productivity, increase market with better quality and lower price, stay in business, provide jobs and provide more jobs.

Challenge and Response: A method of user authentication. The user enters an ID and password and, in return, is issued a challenge by the system. The system compares the user's response to the challenge to a computed response. If the responses match, the user is allowed access to the system. The system issues a different challenge each time. In effect, it requires a new password for each logon.

LETTER C

Champion: A business leader or senior manager who ensures that resources are available for training and projects, and who is involved in project tollgate reviews; also an executive who supports and addresses Six Sigma organizational issues.

Change Agent: An individual from within or outside an organization who facilitates change within the organization. May or may not be the initiator of the change effort.

Change Management: The process of managing and monitoring all changes to products and processes. Change management is typically instituted to avoid risks associated with ad-hoc change, and to ensure a consistent process.

Change Order: A document or digital record which authorizes and provides notification of a modification to a product or order.

Changeover: Process of making necessary adjustments to change or switchover the type of products produced on a manufacturing line. Changeovers usually lead to downtime and for the most part companies try to minimize changeover time to help reduce costs.

Channel: 1) A method whereby a business dispenses its product, such as retail or distribution channel, call center or web based electronic storefront. 2) A push technology that allows users to subscribe to a website to browse offline, automatically display updated pages on their screen savers, and download or receive notifications when pages in the website are modified. Channels are available only in browsers that support channel definitions, such as Microsoft Internet Explorer version 4.0 and above.

Channel Conflict: This occurs when various sales channels within a company's supply chain compete with each other for the same business. An example is where a retail channel is in competition with a web based channel set up by the company.

LETTER C

Channel Partners: Members of a supply chain (i.e. suppliers, manufacturers, distributors, retailers, etc.) who work in conjunction with one another to manufacture, distribute, and sell a specific product.

Channels of Distribution: The downstream flow of products through various outlets or 'channels' which may consist of distributors, retail stores, on-line fulfillment, etc. See also: *Distribution Channel*

Chargeback Provisions: Terms within a contract which govern how a company can charge a supplier for failure to perform agreed upon required activities.

Charging area: A warehouse area where a company maintains battery chargers and extra batteries to support a fleet of electrically powered materials handling equipment. The company must maintain this area in accordance with government safety regulations.

Chock: A wedge usually made of hard rubber or steel, which is firmly placed under the wheel of a trailer, truck, or boxcar to stop it from rolling.

Churning: The practice of customers switching to another supplier based on special discount offers. Particularly used in the cellular telephone or credit card industries. Sometimes this term is applied to supplier management where a practice of choosing the low price vendor is emphasized over maintaining strategic relationships.

City driver: A motor carrier driver who drives a local route as opposed to a long-distance, intercity route.

Civil Aeronautics Board: A federal regulatory agency that implemented economic regulatory controls over air carriers.

LETTER C

CL: Carload rail service requiring shipper to meet minimum weight.

Claim: A charge made against a carrier for loss, damage, delay, or overcharge.

Class I carrier: A classification of regulated carriers based upon annual operating revenues-motor carriers of property: > or = $5 million; railroads: > or =$50 million; motor carriers of passengers: > or =$3 million.

Class II carrier: A classification of regulated carriers based upon annual operating revenues-motor carriers of property: $1-$5 million; railroads: $10-$50 million; motor carriers of passengers: < or = $3 million.

Class III carrier: A classification of regulated carriers based upon annual operating revenues-motor carriers of property: < or = $1 million; railroads: < or = $10 million.

Class Rate: A rate constructed from a classification and a uniform distance system. A class rate is available for any product between any two points.

Classification: An alphabetical listing of commodities, the class or rating into which the commodity is placed, and the minimum weight necessary for the rate discount; used in the class rate structure.

Classification yard: A railroad terminal area where rail cars are grouped together to form train units.

Clearinghouse: A conventional or limited purpose entity generally restricted to providing specialized services, such as clearing funds or settling accounts.

LETTER C

Click-and-Mortar: With reference to a traditional brick-and-mortar company that has expanded its presence online. Many brick-and-mortar stores are now trying to establish an online presence but often have a difficult time doing so for many reasons. Click-and-mortar is "the successful combination of online and real world experience."

Clip Art: A collection of icons, buttons, and other useful image files, along with sound and video files that can be inserted into documents/web pages.

Clipboard: A temporary storage area on a computer for cut or copied items.

Closed-loop Corrective Action (CLCA): A sophisticated engineering system designed to document, verify and diagnose failures, recommend and initiate corrective action, provide follow-up and maintain comprehensive statistical records.

Closed-loop MRP: A production and operations environment which manages materials and production processes through a full closed loop cycle beginning with planning, proceeding through the execution process, and providing any resulting feedback and corrective actions back to the planning function to validate and improve future processes.

Cloud Computing: An emerging computing paradigm where data and services reside in massively scalable data centers and can be ubiquitously accesses from any connected devices over the internet. Similar to the “on demand” concept of SaaS or ASP computing services with the exception of the broad nature of the network of computers.

Cluster Picking: Cluster picking is a methodology of picking into multiple order containers at one time where the containers are typically moved through the process on a cart. The containers could be totes containing order batches, discrete order shippers, or discrete order totes.

LETTER C

Coastal carriers: Water carriers that provide service along coasts serving ports on the Atlantic or Pacific oceans or on the Gulf of Mexico.

Co-destiny: A concept that begins with the idea of long term buyer-supplier relationships and assumes that organizations are uniquely and in most cases inextricably tied to their suppliers and customers.

Co-Packer: A contract co-packer produces goods and/or services for other companies, usually under the other company's label or name. Co-Packers are more frequently seen in CPG and Foods.

Co-Managed Inventory (CMI): A form of continuous replenishment in which the manufacturer is responsible for replenishment of standard merchandise, while the retailer manages the replenishment of promotional merchandise.

Code: A numeric, or alphanumeric, representation of text for exchanging commonly used information. For example: commodity codes, carrier codes,

Codifying: The process of detailing a new standard.

Cold Ironing: A term that ship operators use when they shut down their generator engines and let the iron gets cold. In this setup, ships that have docked at the port plug into the on-shore port power system instead of using their own diesel engines to generate power. Ports and ships which are set up to use cold ironing can see a reduction in emissions.

LETTER C

Collaborative Planning, Forecasting and Replenishment (CPFR®): A concept that aims to enhance supply chain integration by supporting and assisting joint practices. CPFR seeks cooperative management of inventory through joint visibility and replenishment of products throughout the supply chain. Information shared between suppliers and retailers aids in planning and satisfying customer demands through a supportive system of shared information. This allows for continuous updating of inventory and upcoming requirements, essentially making the end-to-end supply chain process more efficient. Efficiency is also created through the decrease expenditures for merchandising, inventory, logistics, and transportation across all trading partners.

Collect Freight: Freight payable to the carrier at the port of discharge or ultimate destination. The consignee does not pay the freight charge if the cargo does not arrive at the destination.

Commercial Invoice: A document created by the seller. It is an official document which is used to indicate, among other things, the name and address of the buyer and seller, the product(s) being shipped, and their value for customs, insurance, or other purposes.

Commercial-off-the-Shelf (COTS): A computer software industry term which describes software offered for sale by commercial developers. This includes products from vendors such as SAP, Oracle, Microsoft, etc., as well as from smaller vendors.

Commercial Zone: The area surrounding a city or town to which rates quoted for the city or town also apply; the area is defined by the ICC.

Committed Capability: The level of operational capability which is currently either part of a planned schedule or is in actual use.

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LETTER C

Committee of American Steamship Lines: An industry association representing subsidized U.S. Flag steamship firms.

Commodities clause: A clause that prohibits railroads from hauling commodities that they produced, mined, owned, or had an interest in.

Commodity: Any physical item that is traded in commerce. The term usually implies an undifferentiated product competing primarily on price and availability.

Commodity Buying: The practice of grouping like purchased items into common groups which are then managed by a single buyer / agent. This practice assumes that an individual who is more focused on a range of products or services can perform that function better than someone who is novice.

Commodity Code: A code describing a commodity or a group of commodities pertaining to goods classification. This code can be carrier tariff or regulating in nature.

Commodity Rate: A rate for a specific commodity and its origin-destination.

Common Carrier: Any carrier engaged in the interstate transportation of persons/property on a regular schedule at published rates, whose services are for hire to the general public.

Common carrier duties: Common carriers are required to serve, deliver, charge reasonable rates, and not discriminate.

Common cost: A cost that cannot be directly assignable to particular segments of the business but that is incurred for the business as a whole.

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LETTER C

Commuter: An exempt for-hire air carrier that publishes a time schedule on specific routes; a special type of air taxi.

Communication Protocol: The method by which two computers coordinate their communications. BISYNC and MNP are two examples.

Company Culture: A concept which describes the psychology, attitudes, experiences, beliefs and values (personal and cultural values) of an organization. The values and customs shared by people and groups in an organization which govern how they interact with each other and with outside organizations.

Comparative Advantage: A principle based on the assumption that an area will specialize in the production of goods for which it has the greatest advantage or least comparative disadvantage.

Competitive Advantage: Value created by a company for its customers that clearly distinguishes it from the competition, and provides its customers a reason to remain loyal.

Competitive Benchmarking: The practice of comparing and rating a company's products or services against those of competitors.

Competitive Bid: A price/service offering by a supplier that must compete with offerings from other suppliers.

Competitive Differentiator: The ability to communicate what makes the company, product or service unique and to stand out from other companies, products or services within the marketplace.

LETTER C

Complete & On-Time Delivery (COTD): A measure of customer service. All items on any given order must be delivered on time for the order to be considered as complete and on time

Complete Manufacture to Ship Time: Average time from when a unit is declared shippable by manufacturing until the unit actually ships to a customer.

Compliance: Meaning that products, services, processes and/or documents comply with requirements.

Compliance Checking: The functions of Electronic Data Interchange (EDI) processing software that ensures that all transmissions contain the mandatory information demanded by the EDI standard. Compares information sent by an EDI user against EDI standards and reports exceptions. Does not ensure that documents are complete and fully accurate, but does reject transmissions with missing data elements or syntax errors.

Compliance Monitoring: A check done by the VAN/third party network or the translation software to ensure the data being exchanged is in the correct format for the standard being used.

Compliance Program: A method by which two or more EDI trading partners periodically report conformity to agreed upon standards of control and audit. Management produces statements of compliance, which briefly note any exceptions, as well as corrective action planned or taken, in accordance with operating rules. Auditors produce an independent and objective statement of opinion on management statements.

LETTER C

Component: Material that will contribute to a finished product but is not the finished product itself. Examples would include tires for an automobile, power supply for a personal computer, or a zipper for a ski parka. Note that what is a component to the manufacturer may be considered the finished product of their supplier.

Computer-aided design (CAD): Computer-based systems for product design that may incorporate analytical and "what if" capabilities to optimize product designs. Many CAD systems capture geometric and other product characteristics for engineering-data-management systems, production and cost analysis, and performance analysis.

Computer-Aided engineering (CAE): The use of computers to model design options to stimulate their performance.

Computer-Aided Manufacturing (CAM): Computerized systems in which manufacturing instructions are downloaded to automated equipment or to operator workstations.

Computer-Aided Process Planning (CAPP): Software-based systems that aid manufacturing engineers in creating a process plan to manufacture a product that's geometric, electronic, and other characteristics have been captured in a CAD database.

Computer-Based Training (CBT): Training that is delivered via computer workstation and includes all training and testing materials.

LETTER C

Computer-Integrated Manufacturing (CIM): A variety of approaches in which computer systems communicate or interoperate over a local-area network. Typically, CIM systems link management functions with engineering, manufacturing, and support operations. In the factory, CIM systems may control the sequencing of production operations, control operation of automated equipment and conveyor systems, transmit manufacturing instructions, capture data at various stages of the manufacturing or assembly process, facilitate tracking and analysis of test results and operating parameters, or a combination of these.

Computerized Maintenance Management Systems (CMMS): Software-based systems that analyze operating conditions of production equipment -- vibration, oil analysis, heat, etc. -- and equipment-failure data, and apply that data to the scheduling of maintenance and repair inventory orders and routine maintenance functions. A CMMS prevents unscheduled machine downtime and optimizes a plant's ability to process product at optimum volumes and quality levels.

Computerized Process Simulation: Use of computer simulation to facilitate sequencing of production operations, analysis of production flows, and layout of manufacturing facilities.

Concept of Operations (CONOPS): There are various uses and users for CONOPS. The primary purpose of the CONOPS is to provide a vision for an initiative or desired capability. In general, the CONOPS provides guidance to those users requiring direction and/or information on developing their own documents, schedules, milestones, and plans.

LETTER C

Concurrent Engineering: A cross-functional, team-based approach in which the product and the manufacturing process are designed and configured within the same time frame, rather than sequentially. Ease and cost of manufacturability, as well as customer needs, quality issues, and product-life-cycle costs are taken into account earlier in the development cycle. Fully configured concurrent engineering teams include representation from marketing, design engineering, manufacturing engineering, and purchasing, as well as supplier--and even customer- companies.

Configuration: The selection and grouping of components and assemblies into a finished product.

Configuration Excellence: Focuses on establishing and maintaining consistency of a product or service's performance. It also looks at the functional and physical attributes of a product with its requirements, design, and operational information throughout the product's life.

Configure/Package-to-Order: A process where the trigger to begin manufacture, final assembly or packaging of a product is an actual customer order or release, rather than a market forecast. In order to be considered a Configure to-Order environment, less than 20% of the value-added takes place after the receipt of the order or release, and virtually all necessary design and process documentation is available at time of order receipt.

Confirmation: With regards to EDI, a formal notice (by message or code) from a electronic mailbox system or EDI server indicating that a message sent to a trading partner has reached its intended mailbox or been retrieved by the addressee.

Confirming Order: A document similar to, or same as a purchase order, which is provided to a supplier as confirmation of a previous verbal purchase request.

LETTER C

Conformance: A term used in quality management to confirm the adherence to specification of a product or service.

Conrail: The Consolidated Rail Corporation established by the Regional Reorganization Act of 1973 to operate the bankrupt Penn Central Railroad and other bankrupt railroads in the Northeast; funding was provided by the 4-R Act of 1976.

Consensus: A state in which all the members of a group support an action or decision, even if some of them don't fully agree with it.

Consignee: The party to whom goods are shipped and delivered. The receiver of a freight shipment.

Consignment: The act of consigning—placing a person or thing in the possession of another, but retaining ownership until the goods are sold. This may apply to shipping or sale in a store (i.e., a consignment shop).

Consignment Inventory: 1) Goods or product that are paid for when they are sold by the reseller, not at the time they are shipped to the reseller. 2) Goods or products which are owned by the vendor until they are sold to the consumer.

Consignor: The party who originates a shipment of goods (shipper). The sender of a freight shipment, usually the seller.

Consolidation: Combining two or more shipments in order to realize lower transportation rates. Inbound consolidation from vendors is called make-bulk consolidation; outbound consolidation to customers is called break- bulk consolidation.

LETTER C

Consolidator: An enterprise that provides services to group shipments, orders, and/or goods to facilitate movement.

Consortium: An association of two or more individuals, companies, organizations or governments (or any combination of these entities) with the objective of participating in a common activity or pooling their resources for achieving a common goal.

Constraint: A bottleneck, obstacle or planned control that limits throughput or the utilization of capacity.

Consul: A government official residing in a foreign country, charged with representing the interests of his or her country and its nationals.

Consular Declaration: A formal statement made to the consul of a country describing merchandise to be shipped to that consul's country. Approval must be obtained prior to shipment.

Consular Documents: Special forms signed by the consul of a country to which cargo is destined.

Consular Invoice: A document, required by some foreign countries, describing a shipment of goods and showing information such as the consignor, consignee, and value of the shipment. Certified by a consular official of the foreign country, it is used by the country's custom.

Consultative Sales: A method of selling that emphasizes customer needs and meeting those needs with solutions combining products and/or services depending on customer profile.

LETTER C

Consumer-Centric Database: Database with information about a retailer's individual consumers, used primarily for marketing and promotion.

Consumer Packaged Goods (CPG): Consumable goods such as food and beverages, footwear and apparel, tobacco, and cleaning products. In general, CPGs are things that get used up and have to be replaced frequently, in contrast to items that people usually keep for a long time, such as cars and furniture.

Consuming the Forecast: The practice of allowing forecast requirements to be reduced by actual orders received. This allows a planning system to avoid duplication of demand when actual customer orders for a period are received.

Consumption Entry: An official Customs form used for declaration of reported goods, also showing the total duty due on such transaction.

Contactless: Refers to the practice of using RFID, Smart Card or other forms of Near Field Communications technology to gather data electronically without the need to actually make contact physically with the item.

Container: 1) A "box," typically 10 to 40 feet long, which is primarily used for ocean freight shipments. For travel to and from ports, containers are loaded onto truck chassis or on railroad flatcars. 2) The packaging, such as a carton, case, box, bucket, drum, bin, bottle, bundle, or bag, that an item is packed and shipped in.

Container Security Initiative (CSI): U.S. Customs program to prevent global containerized cargo from being exploited by terrorists. Designed to enhance security of sea cargo container.

LETTER C

Containerization: A system of intermodal freight transport using standard intermodal containers that are standardized by the International Organization for Standardization (ISO). These can be loaded and sealed intact onto container ships, railroad cars, planes, and trucks.

Contingency Planning: Preparing to deal with calamities (e.g., floods) and non-calamitous situations (e.g., strikes) before they occur

Continuous Flow Distribution (CFD): The streamlined pull of products in response to customer requirements while minimizing the total costs of distribution.

Continuous Flow Manufacturing: A production system organized and sequenced according to the steps involved in the manufacturing process where the product moves seamlessly and continuously through the entire manufacturing process.

Continuous-flow, fixed-path equipment: Materials handling devices that include conveyors and drag lines.

Continuous Improvement (CI): A structured measurement driven process that continually reviews and improves performance.

Continuous Move: A practice used by some large shippers to ensure lower shipping rates and guaranteed capacity. The shipper works with a few core carriers to groups a series of one-way hauls between suppliers, manufacturing plants, distribution centers and sometimes customers into a round trip. The carriers benefit from fewer empty miles, less idle time, better asset utilization and more regular routes.

Continuous Order Release: A process for releasing orders as soon an order is available, versus releasing all orders in batches at specific times.

LETTER C

Continuous Process Improvement (CPI): Continuous Process Improvement is a strategic approach for developing a culture of continuous improvement in the areas of reliability, process cycle times, costs in terms of less total resource consumption, quality, and productivity.
See also: *Kaizen*

Continuous Replenishment: Continuous Replenishment is the practice of partnering between distribution channel members that changes the traditional replenishment process from distributor-generated purchase orders, based on economic order quantities, to the replenishment of products based on actual and forecasted product demand.

Continuous Replenishment Planning (CRP): A program that triggers the manufacturing and movement of product through the supply chain when the identical product is purchased by an end user.

Contract: A legally binding agreement between two or more parties to provide specific products or services.

Contract Administration: The activities associated with managing contract compliance.

Contract Carrier: Carrier engaged in interstate transportation of persons/property by motor vehicle on a for-hire basis, but under continuing contract with one or a limited number of customers to meet specific needs.

Contract Line Items Number (CLIN): Specific items or services separately priced under a contract.

LETTER C

Contract Manufacturing: A relationship where a third party manufactures products that are packaged under another company's label.

Contract Provisions: Stipulations typically located at the end of the contract document, specifying how the parties to the contract should govern their relationship and administer the contract.

Contractor: One that agrees to furnish materials or services at a specified price.

Contractor Logistics Support (CLS): A term in performance based logistics which refers to support in which maintenance operations for a particular military system are performed exclusively by contract support personnel.
CLS (Cost Plus): used for transitional support while cost and resource baselines are being tracked and defined.
CLS (Fixed Price): Used when cost and resource baselines are well-documented, cost and pricing risk are minimal, and both DoD and contractor can define price, incentives and performance outcomes with a high degree of confidence.

Contribution: The difference between sales revenue and variable costs. Contribution is not the same as profit since it only considers the variable costs, it is the amount applied to fixed costs and resulting in profits.

Contribution Margin: The fraction of sales that contributes to the offset of fixed costs. Alternatively, unit contribution margin is the amount each unit sale adds to profit: it's the slope of the Profit line.

Controllable Returns: These are errors or problems caused by the company or a member of the company’s supply chain and often can be resolved by the company. Example of errors or problems are picking and packing errors, improper forecasting, product handling, poor quality control and lack of communication with customers.

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Controlled Access: Referring to an area within a warehouse or yard that is fenced and gated. These areas are typically used to store high-value items and may be monitored by security cameras

LETTER C

Conveyor: A materials handling device that moves freight from one area to another in a warehouse. Roller conveyors make sue of gravity, whereas belt conveyors use motors.

Conveyor Unscrambler: A device that "singulates" a group or set of cartons, bottles or other products so that all can proceed along a conveyor or through filling / packaging equipment in a single line.

Cookie: A computer term. A piece of information from your computer that references what the user has clicked on, or references information that is stored in a text file on the user's hard drive (such as a username). Another way to describe cookies is to say they are tiny files containing information about individual computers that can be used by advertisers to track online interests and tastes. Cookies are also used in the process of purchasing items on the Web. It is because of the cookie that the "shopping cart" technology works. By saving in a text file, the name, and other important information about an item a user "clicks" on as they move through a shopping Website, a user can later go to an order form, and see all the items they selected, ready for quick and easy processing.

Cooperative associations: Groups of firms or individuals having common interests: agricultural cooperative associations may haul up to 25% of their total interstate tonnage in nonfarm, nonmember goods in movements incidental and necessary to their primary business.

Co-opetition: A combination of cooperation & competition that offers the possibility for rivals to benefit from each other's seemingly competitive activities. In short, there are circumstances where having more players to cut the pie means bigger pieces of pie for everyone. An example would be found in the group buying setting where its use refers to the activity of multiple, normally competitive buying group members leveraging each other's buying power to gain reduced pricing.

LETTER C

Coordinated transportation: Two or more carriers of different modes transporting a shipment.

Co-product: The term co-product is used to describe multiple items that are produced simultaneously during a production run. Co-products are often used to increase yields in cutting operations such as die cutting or sawing when it is found that scrap can be reduced by combining multiple-sized products in a single production run. Co- products are also used to reduce the frequency of machine setups required in these same types of operations. Co- products, also known as byproducts, are also common in process manufacturing such as in chemical plants. Although the concept of co-products is fairly simple, the programming logic required to provide for planning and processing of co-products is very complicated.

Core Competency: A specific factor that a business sees as being central to the way it, or its employees, works. It fulfills three key criteria:

1. It provides consumer benefits
2. It is not easy for competitors to imitate
3. It can be leveraged widely to many products and markets.

A core competency can take various forms, including technical/subject matter know-how, a reliable process and/or close relationships with customers and suppliers. It may also include product development or culture, such as employee dedication.

Core Process: Sometimes called ‘core business’ this is the capability that is considered central to a company’s competitive strategy.

Corrective Action: A change implemented to address a weakness identified in a management system, usually brought to the company’s attention by a customer complaint of nonconformities identified during an internal audit or adverse or unstable trends in product and process monitoring identified by the statistical process control (SPC).

LETTER C

Cost Accounting: A management accounting practice that establishes budget and actual cost of operations, processes, departments or product and the analysis of variances, profitability or use of funds. Managers use cost accounting to support decision-making to cut a company's costs and improve profitability.

Cost Allocation: An accounting practice which assigns indirect costs such as overhead to products or services using a known factor such as pieces produced or direct labor costs/hours.

Cost and Freight (CFR): The cost of merchandise as well as the freight costs. The seller is responsible for the product and the transportation costs to the destination point.

Cost Center: In accounting, a sub-unit in an organization that is responsible for costs.

Cost Driver: In accounting, any situation or event that causes a change in the consumption of a resource, or influences quality or cycle time. An activity may have multiple cost drivers. Cost drivers do not necessarily need to be quantified; however, they strongly influence the selection and magnitude of resource drivers and activity drivers.

Cost Driver Analysis: In cost accounting, the examination, quantification, and explanation of the effects of cost drivers. The results are often used for continuous improvement programs to reduce throughput times, improve quality, and reduce cost.

Cost Element: In cost accounting, the lowest level component of a resource, activity, or cost object.

LETTER C

Cost, Insurance, Freight (CIF): A trade term requiring the seller to arrange for the carriage of goods by sea to a port of destination, and provide the buyer with the documents necessary to obtain the goods from the carrier.

Cost Management: The management and control of activities and drivers to calculate accurate product and service costs, improve business processes, eliminate waste, influence cost drivers, and plan operations. The resulting information will have utility in setting and evaluating an organization's strategies.

Cost of Capital: The cost to borrow or invest capital.

Cost of Goods Sold (COGS): The amount of direct materials, direct labor, and allocated overhead associated with products sold during a given period of time, determined in accordance with Generally Accepted Accounting Principles (GAAP)

Cost of Lost Sales: The forgone profit associated with a stockout.

Cost Plus Award-Fee (CPAF): A type of PBL contract pricing that combines a cost basis with an award fee feature. The incentive feature allows a base fee to be adjusted based on success in meeting target performance goals.

Cost Plus Incentive-Fee (CPIF): A type of PBL contract pricing that combines a cost basis with an incentive fee feature. The incentive feature allows a base fee to be adjusted based on the relationship of actual costs to target costs.

Cost Recovery Rate (CRR): Provides the funding stream for a wide variety of program logistics support functions.

LETTER C

Cost Trade-off: The interrelationship among system variables indicates that a change in one variable has cost impact upon other variables. A cost reduction in one variable may be at the expense of increased cost for other variables, and vice versa.

Cost Variance: A type of PBL contract pricing that combines a cost basis with an award fee feature. The incentive feature allows a base fee to be adjusted based on success in meeting target performance goals.

Cost Recovery Rate (CRR): Provides the funding stream for a wide variety of program logistics support functions.

Cost-to-Serve: A chain of activities required to get a company's products or services into their customers' stores and onto their shelves. This includes order taking, picking and freighting the order, arranging promotions by sales reps, processing credits, and merchandising the product.

Costs per Unit Moved: A measure to calculate the cost of moving one unit of product. Calculation: [Total Costs to Move Units] / [Total Number of Units Moved]

Courier service: A fast, door-to-door service for high-valued goods and documents; firms usually limit service to shipments of 50 pounds or less.

Count Back: A process in which order pickers selecting full cases from pallet rack locations perform an immediate cycle count at the completion of the pick for that location, using a Radio Frequency or voice terminal. The use of the count-back program is just one component of being able to prove perfect order picking and the highest degree of inventory accuracy.

Country of Origin: The country of manufacture, production or growth from where a product comes.

LETTER C

Credit Level: The amount of purchasing credit a customer has available. Usually defined by the internal credit department and reduced by any existing unpaid bills or open orders.

Credit Memo: A document issued to provide authorization for a customer account credit, typically due to product returns, billing errors or other adjustments.

Critical Differentiators: This is what makes an idea, product, service or business model unique.

Critical Success Factors (CSF): Necessary conditions for success that can be measured quantitatively for effectiveness, economy, and efficiency; those few areas where satisfactory performance is essential in order for a business to succeed; characteristics, conditions, or variables that have a direct influence on a customer's satisfaction with a specific business process; the set of things that must be done right if a vision is to be achieved.

Critical Value Analysis: A modified ABC analysis in which a subjective value of criticalness is assigned to each item in the inventory.

Cross-Shipment: A term used widely in the electronics industry when shipment of a replacement part or device is made in advance of physical return of the defective part.

Cross-Subsidy: In cost accounting, the inequitable assignment of costs to cost objects, which leads to over costing or under costing them relative to the amount of activities and resources actually consumed. This may result in poor management decisions that are inconsistent with the economic goals of the organization.

LETTER C

Cross Dock / Cross Docking (XDK): A distribution system in which merchandise received at the warehouse or distribution center is not put away, but instead is readied for shipment to retail stores. Cross docking requires close synchronization of all inbound and outbound shipment movements. By eliminating the put-away, storage and selection operations, it can significantly reduce distribution costs.

Cross Functional: A term used to describe a process or an activity that crosses the boundary between functions. A cross functional team consists of individuals from more than one organizational unit or function.

Cross Functional "Process" Metric: A number resulting from an equation, showing the output of a process that spans departments. These types of measures are also known as a process measures because they span across the breadth of a process, regardless for functional/departmental segregation within the process. Example: Perfect Order Index.

Cross Sell: The practice of attempting to sell additional products to a customer during a sales call. For example, when the CSR presents a camera case and accessories to a customer that is ordering a camera.

Critical Success Factor (CSF): Those activities and/or processes that must be completed and/or controlled to enable a company to reach its goals.

Cubage: Cubic volume of space being used or available for shipping or storage.

Cube: The volume of the shipment or package. {Calculation: length x width x depth}

Cube Out: The practice of placing merchandise into a warehouse, truck trailer or shipping container in such a way as to completely utilize the available space.

LETTER C

Cube Utilization: The use of space within a storage area, trailer, or container. Cube utilization is generally calculated as a percentage of total space or of total "usable" space.
Note: there is a point at which too high percent utilization can create inefficiency.

Cubic Space: The measurement of total space or volume available or required in transportation and warehousing.
Calculation: floor space x height

Cumulative Available-to-Promise: A calculation which yields future availability based on planned production or purchases and consumption across multiple future periods.
See also: *Available-to-Promise*

Cumulative Lead Time: The time required to buy components, build and then ship a product.

Cumulative Source/Make Cycle Time: The cumulative internal and external lead time to manufacture shippable product, assuming that there is no inventory on-hand, no materials or parts on order, and no prior forecasts existing with suppliers.

Currency Adjustment Factor (CAF): An added charge assessed by water carriers for currency value changes.

Current good manufacturing practices (CGMP): Regulations enforced by the U.S. Food and Drug Administration for food and chemical manufacturers and packagers.

Customer: 1) In distribution, the Trading Partner or reseller, i.e. Wal-Mart, Safeway, or CVS. 2) In Direct-to- Consumer, the end customer or user.

LETTER C

Customer Acquisition or Retention: The rate by which new customers are acquired, or existing customers are retained. A key selling point to potential marquis partners.

Customer Driven: The end user, or customer, motivates what is produced or how it is delivered.

Customer Facing: Those personnel or activities whose jobs entail actual contact with the customer.

Customer Operations Performance Center (COPC): Call center consulting, certification, training, and benchmarking company.

Customer Order: An actual order, not a forecast or planned order, from a customer for specific products or services.

Customer Order Decoupling Point (CODP): Refers to the split in the physical product acquisition / order / fulfillment process where steps and product form are based on an actual customer order instead of forecasts. This is a condition of postponement and "to order" strategies.

Customer/Order Fulfillment Process: The typical business process which includes receipt and processing of a customer order through delivery.

Customer Profitability: The practice of placing a value on the profit generated by business done with a particular customer.

Customer Receipt of Order to Installation Complete: Average lead-time from receipt of goods at the customer to the time when installation (if applicable) is complete, including the following sub-elements: time to get product up and running, and product acceptance by customer.

LETTER C

Customer Relationship Management (CRM): This refers to information systems that help sales and marketing functions, as opposed to the ERP (Enterprise Resource Planning), which is for back-end integration.

Customer Segmentation: Dividing customers into groups based on specific criteria, such as products purchased, customer geographic location, etc.

Customer Service: Activities between the buyer and seller that enhance or facilitate the sale or use of the seller's products or services.

Customer Service Representative (CSR): The individual who provides customer support via telephone in a call center environment.

Customer Signature/Authorization to Order Receipt: Average lead-time from when a customer authorizes an order to the time that that order is received and order entry can commence.

Customer Wait Time (CWT): The total elapsed time between issuance of a customer order and satisfaction of that order.

Customer-Supplier Partnership: An extended relationship between buyers and sellers based on confidence, credibility, and mutual benefit. The buyer, on its part, provides long-term contracts and assurance of only a small number of competing suppliers. In reciprocation, the seller implements customer's suggestions and commits to continuous improvement in quality of product and delivery.

Customization: Creating a product from existing components into an individual order.

LETTER C

Customs and Border Protection (CBP): Formed during the creation of the Department of Homeland Security in 2003, CBP consists primarily of the customs inspection function formerly performed by the U.S. Customs Service as part of the Department of Treasury, the immigration inspection function formerly performed by the Immigration and Naturalization Service (INS), and the Border Patrol, formerly part of the Department of Justice.

Customs House Broker: A business firm that oversees the movement of international shipments through customs and ensures that the documentation accompanying a shipment is complete and accurate.

Customs-Trade Partnership against Terrorism (C-TPAT): A joint government/business initiative to build cooperative relationships that strengthen overall supply chain and border security. The voluntary program is designed to share information that will protect against terrorists' compromising the supply chain.

Cycle Counting: An inventory control and management practice that refers to a process of regularly scheduled inventory counts (usually daily) that "cycles" through your inventory. Using a “volume based” cycle count strategy, users determine how often certain items or locations are counted using frequency or dollar values segregated into “ABC” categories. Another method is ‘geographic based” where complete counts are sequenced to allow for a complete cycle through the facility within a given time frame. Cycle counting can eliminate the need for wall to wall physical counts and can maintain a higher level of on-going accuracy.

Cycle Time: The amount of time it takes to complete a business process.

LETTER C/D

Cycle Time to Process Excess Product Returns for Resale: The total time to process goods returned as Excess by customer or distribution centers, in preparation for resale. This cycle time includes the time a Return Product Authorization (RPA) is created to the time the RPA is approved, from Product Available for Pick-up to Product Received and from Product Receipt to Product Available for use.

Cycle Time to Process Obsolete and End-of-Life Product Returns for Disposal: The total time to process goods returned as Obsolete & End of Life to actual Disposal. This cycle time includes the time a Return Product Authorization (RPA) is created to the time the RPA is approved, from Product Available for Pick-up to Product Received and from Product Receipt to Product Disposal/Recycle.

Cycle Time to Repair or Refurbish Returns for Use: The total time to process goods returned for repair or refurbishing. This cycle time includes the time a Return Product Authorization (RPA) is created to the time the RPA is approved, from Product Available for Pick-up to Product Received, from Product Receipt to Product Repair/Refurbish begin, and from Product Repair/Refurbish begin to Product Available for use.

Cyclical Demand: A situation where demand patterns for a product run in cycles driven by seasonality or other predictable factors.

Dangerous Goods: Articles or substances capable of posing significant health, safety, or environmental risk, and that ordinarily require special attention including packaging and labeling when stored or transported. {Synonym: HazMat}

LETTER D

Dashboard: A performance measurement tool used to capture a summary of the Key Performance Indicators (KPIs)/metrics of a company. Metrics dashboards/scorecards should be easy to read and usually have "red, yellow, green" indicators to flag when the company is not meeting its metrics targets. Ideally, a dashboard/scorecard should be cross-functional in nature and include both financial and non-financial measures. In addition, scorecards should be reviewed regularly - at least on a monthly basis and weekly in key functions such as manufacturing and distribution where activities are critical to the success of a company. The dashboard/scorecards philosophy can also be applied to external supply chain partners such as suppliers to ensure that supplier's objectives and practices align.

Data Cleansing: The process of detecting and cleaning inaccurate, incomplete, incorrect, and irrelevant records in a data set. The records are deleted, modified or replaced as needed.

Data Communications: The electronic transmission of data, usually in computer readable form, using a variety of transmission vehicles and paths.

Data Dictionary: Lists the data elements for which standards exist. The Joint Electronic Document Interchange (JEDI) committee developed a data dictionary that is employed by many EDI users.

Data Field Formatting: The parameters placed on a column within a database or data entry form on a website. An example of a parameter would be the 8 character limitation for any text entered into a particular data field.

Data Integration: The process of integrating data residing in different sources, and creating a unified view of the data for users.

LETTER D

Data Integrity: Assurance that the data is “whole” or complete. The data integrity perseveres during retrieval, storage, and transfer. In database management, it refers to the process of ensuring the data accurately reflects the environment it is modeling or representing.

Data Interchange Standards Association (DISA): The secretariat, which provides clerical and administrative support to the ASC X12 Committee.

Data Mining: The process of extracting and analyzing data, typically from a computer database, to gather knowledge about hidden patterns or unknown relationships in order to achieve specific business objectives.

Data Pool: A repository of Data within the Global Data Synchronization Network. where trading partners can obtain, maintain and exchange information on items and parties in a standard format through electronic means.

Data Steward: The person responsible for maintaining consistency and precise of data during exchanges between computer systems.

Data Warehouse: A storage architecture designed to hold data extracted from transaction systems, operational data stores and external sources. A repository of an organization’s electronically stored data designed in such a way as to facilitate reporting and analysis, the warehouse combines data in an aggregate, summary form suitable for enterprise-wide data analysis and reporting for predefined business needs.

Database: Data stored in computer-readable form, usually indexed or sorted in a logical order by which users can find a particular item of data they need.

LETTER D

Date Code: Identification applied to a product container or label which provides the specific date of production of the contents. Sometimes it is an actual date, but frequently it is coded for internal purposes. Date codes are often used during product recalls.

Days of Supply: Measure of quantity of inventory-on-hand, in relation to number of days for which usage which will be covered. For example, if a component is consumed in sale or manufacturing at the rate of 100 per day, and there are 1,585 units available on-hand, this represents 15.85 days supply. The goal, in most cases, is to demonstrate efficiency through having a high turnover rate and therefore a low days' inventory. However, realize that this ratio can be unfavorable if either too high or too low. A company must balance the cost of carrying inventory with its unit and acquisition costs, with the potential of lost business and ultimately lost customers if shortages are pervasive.

Days Payable Outstanding (DPO): An estimate of the length of time the company takes to pay its vendors after receiving inventory. If the firm receives favorable terms from suppliers, it has the net effect of providing the firm with free financing. If terms are reduced and the company is forced to pay at the time of receipt of goods, it reduces financing by the trade and increases the firm's working capital requirements. It is calculated: Days Payable Outstanding = 365 / Payables Turnover (Payables Turnover = Purchases / Payables). Calculation: [365] / [Payables Turnover]

Days Sales Outstanding (DSO): A financial indicator that shows both the age, in terms of days, of a company's accounts receivable and the average time it takes to turn the receivables into cash. It is compared to company and industry averages, as well as company selling terms (e.g., Net 30) for determination of acceptability by the company. Calculation: [(Total Receivables) / (Total Credit Sales in the Period Analyzed)] x Number of Days in the Period Analyzed.

LETTER D

DC Bypass: A supply chain best practice that expedites time to market by skirting distribution centers altogether. Businesses using DC bypass load products at point of origin; assign shipments by ultimate destination; clear customs in bulk; deconsolidate at ports; and ship directly to retail outlets or customers. As a result, inventory remains continuously in motion. A traditional supply chain requires multiple handoffs to move product from origin to forwarder, through customs to delivery, and to end customers. By contrast, using DC bypass and outsourced logistics providers, furniture manufacturers, for example, can move products from Asia directly to American retailers. With regard to outbound transportation this is also known as "Direct to Store", a practice that occurs when vendors ship goods directly to the retail store instead of to the retailer's distribution center (DC).

Dead on Arrival (DOA): A term used to describe products which are not functional when delivered. Synonym: Defective.

Deadhead: The return of an empty transportation container back to a transportation facility. Commonly used description of an empty backhaul.
See also: *Backhauling*

Deadweight: The total lifting capacity of a ship expressed in tons of 2240 lbs. It is the difference between the displacement light (without cargo, passengers, fuel, etc.) and the displacement loaded.

Decentralized authority: A situation in which management decision-making authority is given to managers at many levels in the organizational hierarchy.

Decision Support System (DSS): Software that speeds access and simplifies data analysis, queries, etc. within a database management system.

LETTER D

Declaration of Dangerous Goods: To comply with the U.S. regulations, exporters are required to provide special notices to inland and ocean transport companies when goods are hazardous.

Declared Value: The value of the goods, declared by the shipper on a bill of lading, for the purpose of determining a freight rate or the limit of the carrier's liability. Also used by customs as the basis for calculation of duties, etc.

Decomposition: A forecasting practice which separates time series data are separated into two or more component series which are each forecasted individually and them re-composited to product a final forecast. Useful where the individual components are subject to varying trends.

Dedicated Contract Carriage: A third-party service that dedicates equipment (vehicles) and drivers to a single customer for its exclusive use on a contractual basis.

Defect Analysis: A combination of flaw detection—so they may be removed from the product or process—and analysis of defects and errors received—to prevent future defects in the product or process.

Defective Goods Inventory (DGI): Those items that have been returned, have been delivered damaged and have a freight claim outstanding, or have been damaged in some way during warehouse handling.

Defense Logistics Agency (DLA): A possible source of supply.

Defense Working Capital Fund (DWCF): Funding for PBL programs.

LETTER D

Delimiters: 1) ASCII, characters which are used to separate data elements within a data stream. 2) EDI, two levels of separators and a terminator that are integrals part of a transferred data stream. Delimiters are specified in the interchange header. From highest to lowest level, the separators and terminator are segment terminator, data element separator, and component element separator (used only in EDIFACT).

Delivered at Frontier (DAF): Delivery is accomplished when products are cleared for export at a named frontier or border point. The buyer takes delivery here and is reponsible for clearing customs into the destination country.

Delivered Duty Paid (DDP): This is the maximum obligation that can be assumed by a seller. The seller is responsible for all risk and charges up to the consignor's door.

Delivered Duty Unpaid (DDU): The seller provides transportation and risk assumption to the destination, except the buyer must pay customs duties and taxes.

Delivered Ex Quay (DEQ): This is similar to DES, except the seller assumes responsibility for getting the goods off of the ship.

Delivered Ex Ship (DES): The seller's duties are discharged when the ship arrives at the destination. The buyer assumes responsibility for unlading and import clearance.

Delivery Appointment: The time agreed upon between two enterprises for goods or transportation equipment to arrive at a selected location. Typically used to help plan warehouse and receiving / inspection operations and to manage backup of carriers at loading docks.

Delivery-Duty-Paid: Supplier/manufacturer arrangement in which suppliers are responsible for the transport of the goods they have produced, which is being sent to a manufacturer. This responsibility includes tasks such as ensuring products get through Customs.

LETTER D

Delivery Performance to Commit Date: The percentage of orders that are fulfilled on or before the internal Commit date, used as a measure of internal scheduling systems effectiveness. Delivery measurements are based on the date a complete order is shipped or the ship-to date of a complete order. A complete order has all items on the order delivered in the quantities requested. An order must be complete to be considered fulfilled. Multiple line items on a single order with different planned delivery dates constitute multiple orders, and multiple planned delivery dates on a single line item also constitute multiple orders.

Delivery Performance to Request Date: The percentage of orders that are fulfilled on or before the customer's requested date used as a measure of responsiveness to market demand. Delivery measurements are based on the date a complete order is shipped or the ship-to date of a complete order. A complete order has all items on the order delivered in the quantities requested. An order must be complete to be considered fulfilled. Multiple line items on a single order with different planned delivery dates constitute multiple orders, and multiple planned delivery dates on a single line item also constitute multiple orders.
Calculation: [Total number of orders delivered in full and on time to the scheduled request date] / [Total number of orders delivered]

Delphi Method: A systematic forecasting method which relies on a panel of independent experts providing answers to questionnaires in two or more rounds in an effort to gain a consensus opinion.

Delta Nu Alpha: A professional association of transportation and traffic practitioners.

Demand: What customers or users actually want. Typically associated with the consumption of products or services as opposed to a prediction or forecast.

LETTER D

Demand-Driven Supply Network (DDSN): A system of technologies and processes that sense and react to real- time demand across a network of customers, suppliers and employees. In other words, a consumer purchase triggers real-time information movement throughout the supply network, which then initiates movement of product through the network.

Demand-Side Analysis: A system based on economic, geographic and demographic trends, offering planners an opportunity to gain accurate perspective on future demand for products or services.

Demand Based Production: When inventory is “pulled” through production a work center only when needed to satisfy customer a customer requirement.

Demand Chain: Another name for the supply chain, with emphasis on customer or end-user demand pulling materials and product through the chain.

Demand Chain Management: Same as supply chain management, but with emphasis on consumer pull versus supplier push.

Demand Management: The proactive compilation of requirements information regarding demand (i.e., customers, sales, marketing, finance) and the firm's capabilities from the supply side (i.e., supply, operations and logistics management); the development of a consensus regarding the ability to match the requirements and capabilities; and the agreement upon a synthesized plan that can most effectively meet the customer requirements within the constraints imposed by supply chain capabilities.

LETTER D

Demand Planning: The process of identifying, aggregating, and prioritizing, all sources of demand for the integrated supply chain of a product or service at the appropriate level, horizon and interval. The sales forecast is comprised of the following concepts:

1. The sales forecasting level is the focal point in the corporate hierarchy where the forecast is needed at the most generic level, i.e. Corporate forecast, Divisional forecast, Product Line forecast, SKU, SKU by Location.
2. The sales forecasting time horizon generally coincides with the time frame of the plan for which it was developed, i.e. Annual, 1-5 years, 1- 6 months, Daily, Weekly, Monthly.
3. The sales forecasting time interval generally coincides with how often the plan is updated, i.e. Daily, Weekly, Monthly, and Quarterly.

Demand Planning Systems: The systems that assist in the process of identifying, aggregating, and prioritizing, all sources of demand for the integrated supply chain of a product or service at the appropriate level, horizon and interval.

Demand Pull: The concept defined in lean theory which triggers production of materials only upon receipt of an actual customer order and aligns the production capacity of the supply chain to external customer demand patterns.

Demand Sensing: Using channel data to reduce latency in sensing customer buying trends.

Demand Shaping: Using programs, including price, new product launch, trade and sales incentives, promotions, and marketing programs, to increase what customers want to buy.

LETTER D

Demand Signal: A signal from a consumer, customer or using operation that triggers the issue of product or raw material. The demand signal is most efficiently an electronic data transmission, but could be a physical document, Kanban or telephone call.

Demand Supply Balancing: The process of identifying and measuring the gaps and imbalances between demand and resources in order to determine how to best resolve the variances through marketing, pricing, packaging, warehousing, outsource plans or some other action that will optimize service, flexibility, costs, assets (or other supply chain inconsistencies) in an iterative and collaborative environment.

Demand Time Fence (DTF): A feature of MRP type systems which allows for defining the point in time from the current date where all forecasted orders should be discarded in favor of actual customer orders. There may be a blend of actual and forecast orders beyond the time fence.

De-manufacturing: Refers to the process of going in and taking back assets and harvesting the components and parts. After the components are tested, they may be sold into the secondary market or may be upgraded to "as new" and used in production again.

Deming Circle: An iterative four-step problem-solving process typically used in business process improvement. It is also known as the Shewhart cycle, Deming Wheel, or Plan-Do-Study-Act.

Demographic Segmentation: A market segmentation strategy where the intended audience for a given product is divided according to geographic units, such as nations, states, regions, counties, cities, or neighborhoods.

LETTER D

Demurrage: The carrier charges and fees applied when rail freight cars and ships are retained beyond a specific loading or unloading time.

Denied Party List (DPL): A listing of all the entities with whom a company cannot do business due to company policy or government requirements. The Export DPL list is based on information supplied by the United States Government Federal Register and other sources.

Density: A physical characteristic of a commodity measuring its mass per unit volume or pounds per cubic foot; an important factor in rate making, since density affects the utilization of a carrier's vehicle.

Density Rate: A rate based upon the density and shipment weight.

Department of Energy (DOE): Cabinet level department in the United States Government, charged with developing energy and safety policies and guidelines regarding the handling of nuclear material within the United States.

Department of Homeland Security (DHS): Cabinet level department in the United States Government responsible for protecting the United States from terrorist attacks and natural disasters.

Depot: A location where a substance is stored usually for later utilization. A Repair Depot is a location/facility where assets are rebuilt or repaired.

Deregulation: Revisions or complete elimination of economic regulations controlling transportation. The Motor Carrier Act of 1980 and the Staggers Act of 1980 revised the economic controls over motor carriers and railroads, and the Airline Deregulation Act of 1978 eliminated economic controls over air carriers.

LETTER D

Derived Demand: A term in economics, where demand for one good or service occurs as a result of demand for another. This may occur as the former is a part of production of the second. For example, demand for coal leads to derived demand for mining, as coal must be mined for coal to be consumed.

Design For Manufacture / Assembly (DFMA): A product design methodology that provides a quantitative evaluation of product designs.

Design of Experiments (DoE): A branch of applied statistics dealing with planning, conducting, analyzing, and interpreting controlled tests to evaluate the factors that control the value of a parameter or group of parameters

Destination-Enhanced Consolidation: Ganging of smaller shipments to cut cost, often as directed by a system or via pooling with a third party.

Detention Fee: The carrier charges and fees applied when rail freight cars, ship and carriers are retained beyond a specified loading or unloading time.

Deterministic Models: Mathematical model in which outcomes are precisely determined through known relationships among states and events, without any room for random variation. In such models, a given input will always produce the same output, such as in a known chemical reaction. In comparison, stochastic models use ranges of values for variables in the form of probability distributions.

Dial Up: Access a network by dialing a phone number or initiating a computer to dial the number. The dial-up line connects to the network access point via a node or a PAD.

Differential: A discount offered by a carrier that faces a service time disadvantage over a route.

LETTER D

Differentiation: In the postponement supply chain model, this is the point where an end product assumes unique characteristics through final assembly configuration and/or packaging.

Digital Signature: Electronically generated, digitized (as opposed to graphically created) authorization that is uniquely linkable and traceable to an empowered officer.

Direct-to-Store (DTS) Delivery: Same as Direct Store Delivery.

Direct Channel: Your own sales force sells to the customer. Your entity may ship to the customer, or a third party may handle shipment, but in either case your entity owns the sales contract and retains rights to the receivable from the customer. Your end customer may be a retail outlet. The movement to the customer may be direct from the factory, or the product may move through a distribution network owned by your company. Order information in this channel may be transmitted by electronic means.

Direct Cost: A cost that can be directly traced to a cost object since a direct or repeatable cause-and-effect relationship exists. A direct cost uses a direct assignment or cost causal relationship to transfer costs. Direct costs can consist of materials used and labor directly involved in production.

Direct Debit (DD): A method of ACH collection used where the debtor gives authorization to debit his or her account upon the receipt of an entry issued by a creditor.

Direct Product Profitability (DPP): Calculation of the net profit contribution attributable to a specific product or product line.

LETTER D

Direct Production Material: Material that is used in the manufacturing/content of a product (example: Purchased parts, solder, SMT glues, adhesives, mechanical parts etc. Bill-of-Materials parts, etc.)

Direct Retail Locations: A retail location that purchases products directly from your organization or responding entity.

Direct Store Delivery (DSD): Process of shipping direct from a manufacturer's plant or distribution center to the customer's retail store, thus bypassing the customer's distribution center.

Direct Transmission: A transmission whereby data is exchanged directly between sender and receiver computers, without an intervening third-party service.
Synonym: ***Point-to-Point Transmission***

Directed Tasks: Tasks that can be completed based upon detailed information provided by the computer system. An order picking task where the computer details the specific item, location, and quantity to pick is an example of a directed task. If the computer could not specify the location and quantity forcing the worker to choose locations or change quantities, it would not be a directed task. Directed tasks set up the opportunity for confirmation transactions.

Disaster Recovery Planning: Contingency planning specifically related to recovering hardware and software (e.g. data centers, application software, operations, personnel, telecommunications) in information system outages.

Discontinuous Demand: A material demand pattern where periods of demand are separated by periods with little or no demand. Similar to a cyclical demand pattern, but without any expected cyclical pattern.

LETTER D

Discrete Manufacturing: Discrete manufacturing processes create products by assembling unconnected distinct parts as in the production of distinct items such as automobiles, appliances, or computers.

Discrete Order Picking: An order picking method where each individual order is picked, line by line, prior to beginning picking of another order.

Discrete Order Quantity: A production planning technique that generates planned orders in quantities equal to the net customer order requirements in each period.

Disintermediation: When the traditional sales channels are disassembled and the middleman gets cut out of the deal. Such as where the manufacturer ships direct to a retailer, bypassing the distributor.

Dispatching: The carrier activities involved with controlling equipment; involves arranging for fuel, drivers, crews, equipment, and terminal space.

Distributed Inventory: Inventory that is geographically dispersed. For example, where a company maintains inventory in multiple distribution centers to provide a higher level of customer service.

Distribution: The activities associated with moving materials from source to destination. Can be associated with movement from a manufacturer or distributor to customers, retailers or other secondary warehousing / distribution points.

Distribution Center (DC): The warehouse facility which holds inventory from manufacturing pending distribution to the appropriate stores.

Distribution Channel: One or more companies or individuals who participate in the flow of goods and services from the manufacturer to the final user or consumer.

LETTER D

Distribution On Demand (DOD): The order fulfillment state a distribution operation achieves when it can respond, closest to real time, to changes in demand while shipping 100 percent customer compliant orders at the least cost.

Distribution Planning: The process involved in planning for distribution activities. Activities may include inbound / outbound transportation, warehouse management, setting inventory levels, putaway and picking, packaging and loading, and various administrative functions.

Distribution Requirements Planning (DRP): A system of determining demands for inventory at distribution centers and consolidating demand information in reverse as input to the production and materials system.

Distribution Resource Planning (DRP II): A computerized system that integrates distribution with manufacturing by identifying requirements for finished goods and producing schedules for inventory and its movement within the distribution process. Distribution resource planning systems receive data on sales forecasts, customer order and delivery requirements, available inventory, logistics, and manufacturing and purchasing lead times. This data is analyzed to produce a time-phased schedule of resource requirements that is matched against existing supply sources and production schedules to identify the actions that must be taken to synchronize supply and demand.

Distribution Warehouse: A warehouse that stores finished goods and from which customer orders are assembled.

Distributor: A business and industry which acts as a third party local representative and distribution point for a manufacturing firm. These firms may perform some light assembly or kitting of goods, but generally provides a buffer for finished goods. Distributors typically purchase the goods in quantity from the manufacturer and ship to customers in smaller quantities.

LETTER D

Diversion: The practice of selling goods to a competitor that the vendor assumes would be used to service that Customer's store. Example; Grocery Store Chain A buys orange juice from Minute Maid. Grocery Store Chain A, because of their sales volume or because of promotion, can buy product for $12.50 per case. Grocery Store Chain B, because of a lower sales volume, buys the same orange juice for $14.50 per case. Grocery Store Chain A and Grocery Store Chain B get together and make a deal. Grocery Store Chain A resells that product to Grocery Store Chain B for $13.50 per case. Grocery Store Chain A makes $1.00 per case and Grocery Store Chain B gets product for $1.00 less per case than it can buy from Minute Maid.

Diversity: An aspect of a company's social responsibility program related to the use of all people in the workplace, regardless of ethnicity, gender, age, religion, disability, national origin and sexual orientation.

DMAIC: An acronym used by Six Sigma practitioners to remind them of the steps in a Six Sigma improvement project - Define, Measure, Analyze, Improve, Control.

DMZ Separation: Demilitarized zones (DMZ) act as buffers between a trusted network (Supervisory Control and Data Acquisition or SCADA network) and the corporate network or Internet—separated through additional firewalls and routers—which provide an extra layer of security against cyber attacks. Utilizing DMZ buffers is becoming an increasingly common method to segregate business applications from the SCADA network and is a highly recommended additional security measure. A DMZ is sometimes called a “Perimeter network” or a “Three-homed perimeter network.” SI Security, a leading intelligence security company, defines a DMZ as: “a network added between a protected network and an external network in order to provide an additional layer of security.”

LETTER D

Dock-to-Stock: A practice where pre-qualified product is received into inventory, eliminating the normal receiving and inspection handling involved. Also, a warehouse metric used to benchmark the amount of time required to perform the processes associated with getting received items into storage.

Dock-to-Stock Cycle Time: The elapsed time beginning with the delivery of goods from the supplier and ends when those goods are put away in the warehouse and recorded into the inventory management system

Dock receipt: A receipt that indicates an export shipment has been delivered to a steamship company by a domestic carrier.

Document: In EDI, a form, such as an invoice or a purchase order, that trading partners have agreed to exchange and that the EDI software handles within its compliance-checking logic.

Documentation: The papers attached or pertaining to goods requiring transportation and/or transfer of ownership. These may include the packing list, hazardous materials declarations, export / customs documents, etc.

Domain: A computer term for the following: 1) Highest subdivision of the Internet, for the most part by country (except in the U.S., where it's by type of organization, such as educational, commercial, and government). Usually the last part of a host name; for example, the domain part of ibm.com is .com, which represents the domain of commercial sites in the U.S. 2) In corporate data networks, a group of client computers controlled by a server system.

Domestic Trunk Line Carrier: An air carrier classification for carriers that operate between major population centers. These carriers are now classified as major carriers.

LETTER D

Dormant Route: A route over which a carrier failed to provide service 5 days a week for 13 weeks out of a 26-week period.

Double-pallet jack: A mechanized device for transporting two standard pallets simultaneously.

Double Bottoms: A motor carrier operation involving two trailers being pulled by one tractor.

Double Order Point System: An inventory management system that has two order points, one which includes the normal demand expected during the replenishment cycle, and the second being associated with demand expected during the manufacturing process. The goal is to enable facilities in a distribution network to alert a central warehouse or manufacturing of future replenishment orders.

Double Stack: Two containers, one on top of the other, loaded on a railroad flatcar; an intermodal service.

Download: To merge temporary files containing a day's or week's worth of information with the main data base in order to update it.

Downside Flex Agreement: This is a flexibility agreement with a supplier where the upside and down side are negotiated in advance for lead-time, cost, etc.

Downstream: Referring to the demand side of the supply chain. One or more companies or individuals who participate in the flow of goods and services moving from the manufacturer to the final user or consumer.

LETTER D

Drayage: Transportation of materials and freight by a "side-less cart" on a local basis to or from a congested area such as a shipping port or exhibition area to a more open loading / unloading which allows for large trucks, etc. Intermodal freight carriage may also be referred to as drayage. A charge associated with the pick up or delivery of an ocean container.

Driving time regulations: Rules administered by the U.S. Department of Transportation that limit the maximum time a driver may drive in interstate commerce; both daily and weekly maximums are prescribed.

Drop: A situation in which an equipment operator deposits a trailer or boxcar at a facility at which it is to be loaded or unloaded.

Drop and Hook: An arrangement among shipper, carrier and consignee whereby the carrier leaves a trailer filled with freight at a destination and hooks up and hauls away an empty trailer.

Drop Ship: A customer fulfillment strategy where products are shipped directly from the manufacturer or distributor to a customer bypassing the retail or secondary distribution location. Intended to expedite delivery and reduce handling costs. Billing transactions occur in the normal manner, only the material flow is altered.

Drop Trailers: Trailers that are unhooked from a tractor when the truck reaches its destinations.

Drop Yard: Temporary "parking lots" for containers or cargo, located off the wharves and sometimes next to rail yards or import warehouses.

LETTER D

Drum-Buffer-Rope (DBR): A manufacturing execution methodology, named for its three components. The drum is the physical constraint of the plant: the work center or machine or operation that limits the ability of the entire system to produce more. The rest of the plant follows the beat of the drum. They make sure the drum has work and that anything the drum has processed does not get wasted.

Dual Operation: A motor carrier that has both common and contract carrier operating authority.

Dual Rate System: An international water carrier pricing system where a shipper signing an exclusive use agreement with the conference pays a lower rate (10% to %15) than non-signing shippers for an identical shipment.

Dumping: The act of selling goods below costs in selected markets in an effort to gain market share or eliminate competition.

Dunnage: The materials used in packaging, holds and containers to protect goods from damage.

DUNS: Data Universal Numbering System.

DUNS Number: A unique nine-digit number assigned by Dun and Bradstreet to identify a company. DUNS stands for Data Universal Numbering System.

Durable Goods: A good which does not quickly wear out, or more specifically, it yields services or utility over time (typically 3 years or more) rather than being completely used up when used once.

Duty Free Zone (DFZ): An area where goods or cargo can be stored without paying import customs duties while awaiting manufacturing or future transport.

LETTER D/E

Dwell Time: The period of time during which a dynamic process is halted in order for another process to occur.

Dynamic Lot Sizing: A lot-sizing technique where the order quantity subject to continuous re-computation to take into account that demand for the product varies over time.

Dynamic Process Control (DPC): Continuous monitoring of process performance and adjustment of control parameters to optimize process output.

Dynamic Rescheduling: A functional capability of resource planning and operations management systems which provides the ability to reschedule activities "on the fly" in the event of a change in one of the factors affecting the schedule—such as a late shipment or equipment failure.

EAN.UCC: European Article Numbering/ Uniform Code Council. The EAN.UCC System provides identification standards to uniquely identify trade items, logistics units, locations, assets, and service relations worldwide. The identification standards define the construction of globally-unique and unambiguous numbers.

EAN.UCC Information Network (EIN): EAN International and the Uniform Code Council network for the exchange of Global Data Synchronization Network (GDSN), master data between partners of the global supply and demand chain now a part of GS1.

Early Supplier Involvement (ESI): The suppler management strategy which involves suppliers during the beginning of the product design process to draw on their experience and knowledge in an effort to better designs and higher quality results.

LETTER E

Earnings Before Interest and Taxes (EBIT): A measure of a company's earning power from ongoing operations, equal to earnings (revenues minus cost of sales, operating expenses, and taxes) before deduction of interest payments and income taxes.

Economic Order Quantity (EOQ): An inventory model that determines how much to order by determining the amount that will meet customer service levels while minimizing total ordering and holding costs.

Economic Value Added (EVA): A measurement of shareholder value as a company's operating profits after tax, less an appropriate charge for the capital used in creating the profits.

Economy of Scale: The cost advantages that a business obtains due to expansion. They are factors that cause a producer’s average cost per unit to fall as scale is increased.

EDI Standards: Criteria that define the data content and format requirements for specific business transactions (e.g. purchase orders). Using standard formats allows companies to exchange transactions with multiple trading partners easily.

EDI Transmission: A functional group of one or more EDI transactions that are sent to the same location, in the same transmission, and are identified by a functional group header and trailer.

EDIFACT: An abbreviation of the Electronic Data Interchange for Administration, Commerce, and Transport. The United Nations EDI standard.

LETTER E

Efficient Consumer Response (ECR): A demand driven replenishment system designed to link all parties in the logistics channel to create a massive flow-through distribution network. Replenishment is based upon consumer demand and point of sale information.

Electronic Commerce (EC): Also written as e-commerce. Conducting business electronically via traditional EDI technologies, or online via the Internet. In the traditional sense of selling goods, it is possible to do this electronically because of certain software programs that run the main functions of an e-commerce website, such as product display, online ordering, and inventory management. The definition of e-commerce includes business activity that is business-to-business (B2B), business-to-consumer (B2C).

Electronic Data Interchange (EDI): Intercompany, computer-to-computer transmission of business information in a standard format. For EDI purists, "computer-to-computer" means direct transmission from the originating application program to the receiving, or processing, application program. An EDI transmission consists only of business data, not any accompanying verbiage or free-form messages. Purists might also contend that a standard format is one that is approved by a national or international standards organization, as opposed to formats developed by industry groups or companies.

Electronic Data Interchange Association: A national body that propagates and controls the use of EDI in a given country. All EDIAs are nonprofit organizations dedicated to encouraging EDI growth. The EDIA in the United States was formerly TDCC and administered the development of standards in transportation and other industries.

LETTER E

Electronic Funds Transfer (EFT): Refers to the transactions and related computer-based systems used to perform financial (typically banking) transactions between organizations and accounts electronically.

Electronic Mail (E-Mail): The computer-to-computer exchange of messages. E-mail is usually unstructured (free- form) rather than in a structured format. X.400 has become the standard for e-mail exchange.

Electronic Product Code (EPC or ePC): An identification scheme for universally identifying physical objects via RFID tags and other means. Standardized EPC data consists of among other partitions of data, an EPC Manager Number, an object class identification, a filter value, and a serial number used to uniquely identify the instance of the object. Information on the tag may include asset numbers, container code numbers, locations, Global Trade Item Numbers (GTIN), etc. The EPC is a 96-bit tag which unlike a UPC number which only provides information specific to a group of products, gives each product its own specific identifying number, providing greater accuracy in tracking. EPC standards are managed by the global standards organization known as GS1.

Electronic Signature: A form of authentication that provides identification and validation of a transaction by means of an authorization code identifying the individual or organization.

Elkins Act: An amendment to the Interstate Commerce Act that prohibits giving rebates.

e-Marketplace: A web based service which allows individuals or companies to offer products and services or make bids to buy products or services. For example Covisint is the consortium and the name of the automotive eMarketplace.

LETTER E

Embargo: Pertaining to a statement or formula based upon experience or observation rather than on deduction or theory.

Empirical: Denotes information gained by means of observation, experience, or experiment. A central concept in science and the scientific method is that all evidence must be empirical, or empirically based, that is, dependent on evidence or consequences that are observable by the senses.

Employee Performance Management (EPM): A system to develop, monitor, provide feedback and train employees using performance measures to assess their overall development and understanding of tasks.

Empowerment: The process of increasing the capacity of individuals or groups to make choices and to transform those choices into desired actions and outcomes. In the workplace empowered employees have the authority to make decisions and take action in their work areas without prior approval.

Encryption: The transformation of readable text into coded text for security purposes.

End-of-Life: Planning and execution at the end of the life of a product. The challenge is making just the right amount to avoid: 1) ending up with excess, which has to be sold at great discounts or scrapped, or 2) ending up with shortages before the next generation is available.

End-of-Life Inventory: Inventory on hand that will satisfy future demand for products that are no longer in production at your entity. This differs from obsolete inventory because there is an expected future requirement for these products.

LETTER E

End Item: The top level item in a bill of materials. Typically this is a finished product which can be sold as a completed item or repair part.

Engineer-to-Order: A process in which the manufacturing organization must first prepare (engineer) significant product or process documentation before manufacture may begin.

Engineering Change: The formal revision process for engineering drawings/designs in order to modify or correct a part.

Engineering Change Order (ECO): A documented and approved revision to a product or process specification.

Engineering Change Proposal (ECP): A proposal submitted by the seller in response to a buyer request for an ECP to change the existing contract effort. Only the buyer can initiate the request for an Engineering Change Proposal. This activity is usually preceded by a Request For Change. The user, buyer, or the seller can initiate a Request For Change to the contract. It is an exploratory activity.

Enroute: A term used for goods in transit or on the way to a destination.

Enterprise-Wide ABM: A management information system that uses activity-based information to facilitate decision making across an organization.

Enterprise Application Integration (EAI): A computer term for the tools and techniques used in linking ERP and other enterprise systems together. Gartner say 'firms implementing enterprise applications spend at least 30% on point-to-point interfaces'.

LETTER E

Enterprise Resource Planning (ERP) System: A class of software for planning and managing "enterprise-wide" the resources needed to take customer orders, ships them, account for them and replenish all needed goods according to customer orders and forecasts. Often includes electronic commerce with suppliers. Examples of ERP systems are the application suites from SAP, Oracle, PeopleSoft and others.

Entrust: A group that is organized and managed by a community of companies who have a common interest in exchanging supply chain data such as material availability, orders, shipments, etc. An example is E2Open. The community decides on standards for data formats and protocols.

Enveloping: An EDI management software function that groups all documents of the same type, or functional group, and bound for the same destination into an electronic envelope. Enveloping is useful where there are multiple documents such as orders or invoices issued to a single trading partner that need to be sent as a packet.

Environmental Health and Safety (EH&S): The category of processes, procedures and regulations related to addressing the needs of maintaining environmental quality standards for health and safety. Includes the RoHS (Restriction of Hazardous Substances) and WEEE (Waste Electrical and Electronic) standards. Frequently referred to as a part of “corporate citizenship”.

Environmental Protection Agency (EPA): A federal agency in the United States Government that is tasked with regulating chemicals and protecting human health by safeguarding the natural environment (air, water, and land).

LETTER E

Environmentally Sensitive Engineering: A design process where issues related to disposal or recycling of packaging and used products is considered. May be part of a regulatory requirement associated with programs such as RoHS or WEEE to address compounds that are hazardous to the environment.

ePedigree: An electronic document which satisfies a pedigree requirement. The primary purpose of an epedigree is to protect consumers from contaminated medicine or counterfeit drugs.

EPS: A computer term. Encapsulated Postscript. An extension of the PostScript graphics file format developed by Adobe Systems. EPS lets PostScript graphics files be incorporated into other documents.

Ergonomic: The science of creating workspaces and products which are human friendly to use.

Equipment: The rolling stock carriers use to facilitate the transportation services that they provide, including containers, trucks, chassis, vessels, and airplanes, among others.

Equipment ID: An identifier assigned by the carrier to a piece of equipment.

Equipment Positioning: The process of placing equipment at a selected location.

Ethernet: A computer term for the most commonly used type of local area network (LAN) communication protocol using coaxial or twisted pair wiring.

Ethical standards: Principals, which when followed, promote values such as trust, good behavior, fairness, and/or kindness.

LETTER E

European Article Number (EAN): A defined numbering mechanism used in Europe to uniquely identify every retail product and packaging option. The EAN is similar in concept and design to the UPC code and is usually what the barcode represents on goods.

Evaluated Receipts Settlement (ERS): A process for authorizing payment for goods based on actual receipts with purchase order data, when price has already been negotiated. The basic premise behind ERS is that all of the information in the invoice is already transmitted in the shipping documentation. Therefore, the invoice is eliminated and the shipping documentation is used to pay the vendor.

Exception-Based Processing: A computer term for applications that automatically highlight particular events or results which fall outside pre-determined parameters. This saves considerable effort by automatically finding problems and alerting the right persons. An example would be where a shorted item on a purchase order receipt would automatically notify a purchasing agent for follow-up.

Ex Works (EXW): The buyer assumes total responsibility for the shipment. Delivery is accomplished when the product is handed over to the buyer's representative at the shipper's plant or DC. The buyer is responsible for the freight costs, insurance, export and import clearance, and all customs charges.

Exception Rate: A deviation from the class rate; changes (exceptions) made to the classification.

Excess and Obsolescence (E&O): The accounting value assigned to the cost associated with inventory that is disposed of as being excess or obsolete.

Exclusive Patronage Agreements: A shipper agrees to use only member liner firms of a conference in return for a 10% to 15% rate reduction.

LETTER E

Exclusive Use: Carrier vehicles that are assigned to a specific shipper for its exclusive use.

Executive Dashboard: A series of cross-functional metrics that span the performance of the entire company and indicate the overall health of the company. Usually an Executive Dashboard includes the top KPIs for the company – and when possible is limited to the 'vital few' that fit on a one page summary.

Exemplar: Refers to a model or practice that should be imitated.

Exempt Carrier: A for-hire carrier that is free from economic regulation. Trucks hauling certain commodities are exempt from Interstate Commerce Commission economic regulation. By far the largest portion of exempt carrier transports agricultural commodities or seafood.

Expediting: 1) Moving shipments through regular channels at an accelerated rate. 2) To take extraordinary action because of an increase in relative priority, perhaps due to a sudden increase in demand.

Expert system: A computer program that mimics a human expert.

Exponential Smoothing Forecast: A statistical analysis technique that can be applied to time series data, either to produce smoothed data for presentation, or to make forecasts. The time series data themselves are a sequence of observations. The observed phenomenon may be an essentially random process, or it may be an orderly, but noisy, process.

LETTER E

Export: 1) In logistics, the movement of products from one country to another. For example, significant volumes of cut flowers are exported from The Netherlands to other countries of the world. 2) A computer term referring to the transfer of information from a source (system or database) to a target.

Export Broker: An enterprise that brings together buyer and seller for a fee, then eventually withdraws from the transaction.

Export Compliance: Complying with the rules for exporting products, including packaging, labeling, and documentation.

Export Declaration: A document required by the Department of Commerce that provides information as to the nature, value, etc., of export activity.

Export License: A document secured from a government authorizing an exporter to export a specific quantity of a controlled commodity to a certain country. An export license is often required if a government has placed embargoes or other restrictions upon exports.

Export Processing Zone (EPZ): A term used in various countries similar to a Free Trade Zone.

Export Sales Contract: The initial document in any international transaction; it details the specifics of the sales agreement between the buyer and seller.

Exporter Identification Number (EIN): A number required for the exporter on the Shipper's Export Declaration. A corporation may use their Federal Employer Identification Number as issued by the IRS; individuals can use their Social Security Numbers.

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LETTER E

Exports: A term used to describe those products produced in one geography (typically a country) and shipped / sold in another.

Extended Enterprise: Refers to the concept where an organization's internal capabilities are extended by virtue of their supply chain partners to form a larger logical entity.

Extensible Markup Language (XML): A computer term for a language that facilitates direct communication among computers on the Internet. Unlike the older hypertext markup language (HTML), which provides data tags giving instructions to a web browser about how to display information, XML tags give instructions to a browser or to application software which help to define the specifics about the category of information.

External Factory: Refers to the concept where an organization's internal productions capabilities are extended through the addition those of its suppliers.

External Registration Company: A company that performs audits against an established set of standards, i.e. ISO 9001:2008.

Extranet: A computer term describing a private network (or a secured link on the public internet) that links separate organizations and that uses the same software and protocols as the Internet. Used for improving supply chain management.

Extrinsic Forecast: A forecast tied to a linked indicator outside the company instead of using internal past product demand history. It normally uses a leading indicator such as housing starts or weather pattern changes that have been demonstrated in the past to have a predictive effect on the company's demand.

LETTER F

Fabricator: An industrial term, applies to firms that build machines, structures components and other equipment, by cutting, shaping otherwise creating components from raw materials, and assembling components made from raw materials.

Face: In a warehouse or retail store this refers to the continuous row of racks and shelves on one side of an aisle.

Facings Deep: In a warehouse location or a retail store shelf space, this refers to the number of units which can be placed from front to back in a single position.

Facilities: An installation, contrivance, or other thing which facilitates something; a place for doing something: Commercial or institutional buildings, including offices, plants and warehouses.

Factory Gate Pricing: Like DSD in reverse, factory gate pricing (FGP) is a supply chain initiative that has been gaining popularity among retailers in England. With FGP, retailers buy goods at the suppliers' "gate" and take care of getting it to their stores or distribution centers, either with their own trucks or those of their contracted carriers.

Failure Modes Effects Analysis (FMEA): A pro-active method of predicting faults and failures so that preventive action can be taken.

Fair Labor Standards Act (FLSA): A United States federal law that established a national minimum wage, guarantees time and a half for overtime in certain jobs and prohibits most employment of minors in "oppressive child labor."

LETTER F

Fair return: A level of profit that enables a carrier to realize a rate of return on investment or property value that the regulatory agencies deem acceptable for that level of risk.

Fair-share Quantity Logic: A stock management / distribution technique that attempts to fairly share a given volume of available stock between multiple customers or distribution centers when the stock available is less than the cumulative demand.

Fair Value: The value of the carrier's property; the basis of calculation has included original cost minus depreciation, replacement cost, and market value.

Fast and Secure Trade (FAST): U.S. Customs program that allows importers on the U.S./Canada border to obtain expedited release for qualifying commercial shipments.

Fast Moving Consumer Goods (FMCG): Fast Moving Consumer Goods are packaged commercial products that are consumed through use. They include pre-packaged food and drinks, alcohol, health and beauty items, tobacco products, paper products, household cleansers and chemicals, animal care items, anything that we need, can buy right off the shelf, and use up through daily living.

Feature: A unique aspect of a specific product or service which has been identified and provided as a marketing advantage. Features may be inherent in the basic product or can be added as an option or accessory. In some cases a variety of a specific feature may be offered and some features could be required or optional.

Federal Acquisition Regulation (FAR): A U.S. DoD document which describes rules and processes for acquiring products and/or services from suppliers.

LETTER F

Federal Acquisition Regulation Supplement (FARS): A U.S. DoD document which provides various definitions of commerciality of which any one of these or combination of these can be used to justify commerciality.

Federal Aviation Administration: The US federal agency charged with administering federal safety regulations governing air transportation.

Federal Drug Administration (FDA): An agency of the United States Department of Health and Human Services that is responsible for the regulation of and supervision of the safety of foods, dietary supplements, drugs, vaccines, biological medical products, blood products, medical devices, radiation-emitting devices, veterinary products, and cosmetics.

Federal Emergency Management Agency (FEMA): An agency that is part of the United States Department of Homeland Security. It is responsible for coordinating a response to any disaster within the United States, in the case that the event possibly overwhelms the resources of local and state authorities.

Federal Maritime Commission: A regulatory agency that controls services, practices, and agreements of international water common carriers and noncontiguous domestic water carriers.

Feeder Railroad Development Program: A Federal program which allows any financially responsible person (except Class I and Class II carriers) with ICC approval to acquire a rail line having a density of less than 3 million gross ton-miles per year, in order to avert the line being abandoned.

Field Finished Goods: Inventory which is kept at locations outside the four walls of the manufacturing plant (i.e., distribution center or warehouse).

LETTER F

Field Service Parts: Parts inventory kept at locations outside the four walls of the manufacturing plant (i.e., distribution center or warehouse, service vehicle stock, etc.).

Field Warehouse: A warehouse on the property of the owner of the goods that stores goods that are under the custody of a bona fide public warehouse manager. The public warehouse receipt is used as collateral for a loan.

File Transfer Protocol (FTP): The Internet service that transfers files from one computer to another, over standard phone lines.

Filed rate doctrine: The legal rate the common carrier may charge; is the rate published in the carrier's tariff on file with the ICC.

Fill Rate: The percentage of order items that the picking operation actually fills within a given period of time.

Fill Rates by Order: Whether orders are received and released consistently, or released from a blanket purchase order, this metric measures the percentage of ship-from-stock orders shipped within 24 hours of order "release". Make-to-Stock schedules attempt to time the availability of finished goods to match forecasted customer orders or releases. Orders that were not shipped within 24 hours due to consolidation but were available for shipment within 24 hours are reported separately. In calculating elapsed time for order fill rates, the interval begins at ship release and ends when material is consigned for shipment.

Final Assembly: The highest level assembled product, as it is shipped to customers. This terminology is typically used when products consist of many possible features and options that may only be combined when an actual order is received.

LETTER F

Final Assembly Schedule (FAS): A list of scheduled operations required to produce completed products in a make to-order or assemble-to-order manufacturing process. It may involve secondary operations beyond the final assembly which are required to complete sub-assemblies of components needed to assemble the finished product.

Finance lease: An equipment-leasing arrangement that provides the lessee with a means of financing for the leased equipment; a common method for leasing motor carrier trailers.

Financial responsibility: Motor carriers are required to have body injury and property damage (not cargo) insurance or not less than $500,000 per incident per vehicle; higher financial responsibility limits apply for motor carriers transporting oil or hazardous materials.

Finished Goods Inventory (FG or FGI): Products completely manufactured, packaged, stored, and ready for distribution.

Finite Forward Scheduling: A capacity constrained scheduling technique that creates a production schedule using forecast demand by proceeding sequentially through incremental future periods while not exceeding the available capacity during each period.

Finite Scheduling: A method of creating production schedules which takes resource availability into account. Schedule dates are adjusted forward or backward in time as necessary in order to maintain capacity constraints.

LETTER F

Firewall: A computer term for a method of protecting the files and programs on one network from users on another network. A firewall blocks unwanted access to a protected network while giving the protected network access to networks outside of the firewall. A company will typically install a firewall to give users access to the Internet while protecting their internal information.

Firm Planned Order: A planned order which has been committed to production.

First Expired, First Out (FEFO): A stock control rule allowing the management of products having an eat-by date or short shelf life. FEFO can be used for any product but is most frequently used for food or cold storage.

First In, First Out (FIFO): Warehouse term meaning first items stored are the first used. In accounting this tem is associated with the valuing of inventory such that the latest purchases are reflected in book inventory. While generally considered an accounting notion, FIFO usage is common where products may have a shelf life.

First Mover Advantage: Market innovator, putting the company in the leadership position.

First Pass Yield: The ratio of usable, specification conforming output from a process to its input, achieved without rework or reprocessing.

Fixed-Location Storage: A stocking strategy which uses set warehouse locations assigned to each SKU. If additional storage is required the excess stock will be placed in an “overflow” area with appropriate cross references in systems or on bin labels. Locations are typically reviewed periodically as a part of a slotting strategy.

Fixed-Period Requirements: A re-order technique where the quantity to be ordered should be enough to cover forecast requirements for a fixed number of periods.

LETTER F

Fixed Costs: Costs, which do not fluctuate with business volume in the short run. Fixed costs include items such as depreciation on buildings and fixtures.

Fixed Interval Inventory Model: A setup wherein each time an order is placed for an item, the same (fixed) quantity is ordered.

Fixed Interval Order System: See *Fixed Reorder Cycle Inventory Model*

Fixed Order Quantity: An inventory reorder method which causes all replenishment orders to be a pre-determined size or a multiple thereof. This is typically introduced to accommodate price breaks, packaging or shipping requirements.

Fixed Order Quantity System: See *Fixed Reorder Cycle Inventory Model*

Fixed Overhead: Cost elements such as depreciation, rent, insurance, and office expense, etc., which do not vary as a result of output volume or sales revenue.
See also: *Indirect Cost*

Fixed Price (FP): A type of contract where a specified price is paid for a specific product, service, or goal.

Fixed Quantity Inventory Model: A setup wherein a company orders the same (fixed) quantity each time it places an order for an item.

Fixed Reorder Cycle Inventory Model: A re-ordering strategy where orders are placed on a fixed order schedule and the order quantity is adjusted from order to order to accommodate actual consumption or forecast requirements.

LETTER F

Fixed Reorder Quantity Inventory Model: A re-ordering strategy where orders are placed for a fixed order quantity whenever the quantity on hand plus on order reaches a pre-defined order point.

Flag of Convenience: A ship owner registers a ship in a nation that offers conveniences in the areas of taxes, manning, and safety requirements; Liberia and Panama are two nations known for flags of convenience.

Flat: A loadable platform having no superstructure whatever but having the same length and width as the base of a container and equipped with top and bottom corner fittings. This is an alternative term used for certain types of specific purpose containers - namely platform containers and platform-based containers with incomplete structures.

Flat File: A computer term which refers to any file having fixed-record length, or in EDI, the file produced by EDI translation software to serve as input to the interface. Usually includes the same fields as the original file, but each field is expanded to its maximum length. Does not have delimiters.

Flatbed: A flatbed is a type of truck trailer that consists of a floor and no enclosure. A flatbed may be used with “sideboards” or “tie downs” which keep loose cargo from falling off.

Flatcar: A rail car without sides; used for hauling machinery.

Flexibility: Ability to respond quickly and efficiently to changing customer and consumer demands.

Flexible-path equipment: Materials handling devices that include hand trucks and forklifts.

LETTER F

Flexible Specialization: A strategy based on multi-use equipment, skilled workers and innovative senior management to accommodate the continuous change that occurs in the marketplace.

Float: The time required for documents, payments, etc. to get from one trading partner to another.

Floor-Ready Merchandise (FRM): Goods shipped by suppliers to retailers with all necessary tags, prices, security devices, etc. already attached, so goods can be cross docked rapidly through retail DCs, or received directly at stores.

Floor Loading: Containerized freight is usually not palletized. Instead, the bottom layer of boxes is loaded onto the floor of the container. As a result, more boxes can be loaded into a container, but the containers take much longer to unload.

Flow-Through Distribution: A process in a distribution center in which products from multiple locations are brought in to the D.C. and are re-sorted by delivery destination and shipped in the same day. Typically involving a combination of TL and LTL carrier resources, this practice eliminates warehousing, reduces inventory levels and speeds order turnaround time.

Flow Rack: Storage rack that utilizes shelves (metal) that are equipped with rollers or wheels. Such an arrangement allows product and materials to "flow" from the back of the rack to the front and therein making the product more accessible. Flow racks are popular for small-quantity order-picking, but are also seen in warehouses which have high throughput of pallets on pallet flow racks.

FOB Destination: Title passes at destination, and seller has total responsibility until shipment is delivered.

LETTER F

FOB Origin: Title passes at origin, and buyer has total responsibility over the goods while in shipment.

For-hire Carrier: A carrier that provides transportation service to the public on a fee basis.

Forecast: An estimate of future customer demand. Forecasts are typically made using scientific techniques based on historical usage and adjusted to accommodate various factors such as life cycle, cyclical usage patterns, promotions and pricing actions.

Forecast Accuracy: A measurement of the level of accuracy inherent in your forecast as a percent of actual units or dollars shipped. Forecast accuracy in the supply chain is typically measured using the Mean Absolute Percent Error (MAPE). However, there are confusions between the statistical definition of MAPE and its application among supply chain planners. Statistically MAPE is defined as the average of percentage errors. Most practitioners however define and use the MAPE as the Mean Absolute Deviation divided by Average Sales. You can think of this as a volume-weighted MAPE. In some references, this is also referred to as the mean absolute difference (MAD)/mean ratio. Calculation: [1-(|Actual Forecast|/Sum of Actual)]

Forecast Cycle: Cycle time between forecast regenerations that reflect true changes in marketplace demand for shippable end products.

Forecasting: Predictions of how much of a product will be purchased by customers. Relies upon both quantitative and qualitative methods.

Foreign Trade Zone (FTZ): An area or zone set aside at or near a port or airport, under the control of the U.S. Customs Service, for holding goods duty-free pending customs clearance.

LETTER F

Forklift truck: A machine-powered device that is used to raise and lower freight and to move freight to different warehouse locations.

Form utility: The value created in a good by changing its form, through the production process.

Four P's: A set of 4 elements referred to as the 'marketing mix', it is a set of controllable tactical marketing tools which work together to achieve company objectives. The elements are product, price, place, and promotion.

Four Wall Inventory: The stock which is contained within a single facility or building.

Fourier Series: A mathematical equation used in forecasting. An infinite series in which the terms are constants multiplied by sine or cosine functions of integer multiples of the variable and which is used in the analysis of periodic functions.

Fourth-Party Logistics (4PL): Differs from third party logistics in the following ways; 1)4PL organization is often a separate entity established as a joint venture or long-term contract between a primary client and one or more partners; 2)4PL organization acts as a single interface between the client and multiple logistics service providers; 3) All aspects (ideally) of the client's supply chain are managed by the 4PL organization; and, 4) It is possible for a major third-party logistics provider to form a 4PL organization within its existing structure. The term was registered by Accenture as a trademark in 1996 and defined as "A supply chain integrator that assembles and manages the resources, capabilities, and technology of its own organization with those of complementary service providers to deliver a comprehensive supply chain solution.", but is no longer registered.

Forty-foot Equivalent Unit (FEU): A standard size intermodal container.

LETTER F

Forklift truck: A machine-powered device that is used to raise and lower freight and to move freight to different warehouse locations.

Form utility: The value created in a good by changing its form, through the production process.

Four P's: A set of 4 elements referred to as the 'marketing mix', it is a set of controllable tactical marketing tools which work together to achieve company objectives. The elements are product, price, place, and promotion.

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LETTER F

Free Alongside Ship (FAS): Requires the seller to deliver the product alongside a given vessel at a port.
Note: *INCOTERM definition*

Free Carrier (FCA): Provides that the seller fulfills the responsibility when the product is delivered to a carrier.
Note: *INCOTERM definition*

Free on Board (FOB): Contractual terms between a buyer and a seller, which define where title transfer takes place.

Free Time: The period of time allowed for the removal or accumulation of cargo before charges become applicable.

Free Trade Zone (FTZ): Also known as an export processing zone (EPZ), one or more special areas of a country where some normal trade barriers such as tariffs and quotas are eliminated and bureaucratic requirements are lowered in hopes of attracting new business and foreign investments. Free trade zones can be defined as labor intensive manufacturing centers that involve the import of raw materials or components and the export of factory products.

Freezing Inventory Balances: In most cycle counting programs the term "freezing" refers to copying the current on-hand inventory balance into the cycle count file. This may also be referred to as taking a snapshot of the inventory balance. It rarely means that the inventory is actually frozen in a way that prevents transactions from occurring.

Freight: Goods being transported from one place to another.

LETTER F

Freight-all-kinds (FAK): An approach to rate making whereby the ante is based only upon the shipment weight and distance; widely used in TOFC service.

Freight Bill: The carrier's invoice for transportation charges applicable to a freight shipment.

Freight Carriers: Companies that haul freight, also called "for-hire" carriers. Methods of transportation include trucking, railroads, airlines, and sea borne shipping.

Freight Charge: The rate established for transporting freight.

Freight Collect: The freight and charges to be paid by the consignee.

Freight Consolidation: The act of combining individual shipments into a single lot in order to reduce costs or improve transport equipment utilization. Consolidation can take a variety forms by customer, geography, shipping land or schedule. Consolidation may occur at the shipping facility or may be a service of a third party.

Freight Forwarder: An organization which provides logistics services as an intermediary between the shipper and the carrier, typically on international shipments. Freight forwarders provide the ability to respond quickly and efficiently to changing customer and consumer demands and international shipping (import/export) requirements.

Freight Forwarders Institute: The freight forwarder industry association.

Freight Prepaid: The freight and charges to be paid by the consignor.

LETTER F

Front Haul: The first leg of the truck trip that involves hauling a load or several loads to targeted destinations.

Frozen Zone: In forecasting, this is the period in which no changes can be made to scheduled work orders based on changes in demand. Use of a frozen zone provides stability in the manufacturing schedule.

Fulfillment: The act of fulfilling a customer order. Fulfillment includes order management, picking, packaging, and shipping.

Fulfillment Agent: May be designated as an agent to plan, schedule, or control the process of executing the logistics chain.

Full-Service Leasing: An equipment-leasing arrangement that includes a variety of services to support leased equipment (i.e., motor carrier tractors).

Full-time Equivalents (FTE): Frequently organizations make use of contract and temporary employees; please convert contract, part-time, and temporary employees to full-time equivalents. For example, two contract employees who worked for six months full-time and a half-time regular employee would constitute 1.5 full-time equivalents. 1 FTE = 2000 hours per year.

Full Container Load (FCL): A term used when goods occupy a whole container.

Full Mission-Capable (FMC): Used in DoD PBL to describe the material condition of any piece of military equipment, aircraft, or training device indicating that it can perform all of its missions.

LETTER F

Full Truck Load (FTL): A term which defines a shipment which occupies at least one complete truck trailer, or allows for no other shippers goods to be carried at the same time.

Fully Allocated Cost: The variable cost associated with a particular unit of output plus an allocation of common cost.

Functional Acknowledgment (FA): A specific EDI Transaction Set (997) sent by the recipient of an EDI message to confirm the receipt of data but with no indication as to the recipient application's response to the message. The FA will confirm that the message contained the correct number of lines, etc. via control summaries, but does not report on the validity of the data.

Functional Group: Part of the hierarchical structure of EDI transmissions, a Functional Group contains one or more related Transaction Sets preceded by a Functional Group header and followed by a Functional Group trailer.

Functional Metric: A number resulting from an equation, showing the impact of one or more parts of a functional/department process. This is also known as a results measure as the metric measures the results of one aspect of the business. Example: Distribution Center Fill Rate.

Functional Silo: A view of an organization where each department or functional group is operated independent of other groups within the organization. Each group is referred to as a “Silo”.
Antonym: ***Integrated Structure***

Fungible: A fungible item is one which could be exchanged with another equal part or quantity with no significant difference, and still satisfies the obligation, a commodity is a fungible item.

LETTER F/G

Future order: A purchase or customer order which is placed for delivery at a time beyond the normal order cycle. The purpose may be to queue orders against future availability of new products, or as a means to advise suppliers of future requirements.

Game Theory: A branch of applied mathematics that is used in the social sciences, most notably in economics, as well as in biology, engineering, political science, international relations, computer science, and philosophy. Game theory attempts to mathematically capture behavior in strategic situations, in which an individual's success in making choices depends on the choices of others, a sort of “Win-Win” strategy.

Gaming the System: Using rules, policies and procedures of a system against itself for purposes outside what of those rules, policies and procedures were initially intended.

Gain Sharing: A method of incentive compensation where supply chain partners share collectively in savings from productivity improvements. The concept provides an incentive to both the buying and supplier organizations to focus on continually re-evaluating, re-energizing, and enhancing their business relationship. All aspects of value delivery are scrutinized, including specification design, order processing, inbound transportation, inventory management, obsolescence programs, material yield, forecasting and inventory planning, product performance and reverse logistics. The focus is on driving out limited value cost while protecting profit margins.

Gap analysis: The process of determining and documenting the variance (gap) between goals and current performance.

Gateway: The connection that permits messages to flow freely between two networks.

LETTER G

Gathering lines: Oil pipelines that bring oil from the oil well to storage areas.

Gemba Kanri: A Lean management term which refers to the control and improvement of the value creating processes.

Genchi Genbutsu: A Japanese phrase used in Lean management which means "Go and see for yourself" Rather than simply hear or read about a problem and make a suggestion for improvement, one should actually go to its direct location and experience the situation first hand.

General-merchandise Warehouse: A warehouse that is used to store goods that are readily handled, are packaged, and do not req1ire a controlled environment.

General Agreement on Tariffs and Trade (GATT): The General Agreement on Tariffs and Trade started as an international trade organization in 1947, and has been superseded by the World Trade Organization (WTO). GATT (the agreement) covers international trade in goods. An updated General Agreement is now the WTO agreement governing trade in goods. The 1986-1994 “Uruguay Round” of GATT member discussions gave birth to the WTO and also created new rules for dealing with trade in services, relevant aspects of intellectual property, dispute settlement, and trade policy reviews. GATT 1947: The official legal term for the old (pre-1994) version of the GATT. GATT 1994: The official legal term for new version of the General Agreement, incorporated into the WTO, and including GATT 1947.

General Commodities Carrier: A common motor carrier that has operating authority to transport general commodities, or all commodities not listed as special commodities.

LETTER G

Global Commerce Initiative (GCI): A business requirements group that brings manufacturers and retailers together on a worldwide basis to simplify and enhance global commerce and improve consumer value in the overall retail supply chain. It is a global user group, and its charter is to drive the implementation of EAN.UCC standards and best practices.

Global Data Synchronization Network (GDSN): The GDSN is an Internet-based, interconnected network of interoperable data pools and a Global Registry, the GS1 Global Registry, that enables companies around the world to exchange standardized and synchronized supply chain data with their trading partners.

Global Location Number (GLN): Unique location number mandatory within the Global Data Synchronization process to identify data owners/info providers, etc such as Distributors, brokers, manufacturers.

Global Positioning System (GPS): A system which uses satellites to precisely locate an object on earth. Used by trucking companies to locate over-the-road equipment.

Global Standards Management Process (GSMP): The Global Standards Management Process (GSMP) is the Global Process established in January 2002 by EAN International and the Uniform Code Council, Inc. (UCC) for the development and maintenance of Global Standards and Global Implementation Guidelines that are part of the EAN.UCC system.

LETTER G

Global Strategy: An organization's strategic guide to globalization. A global strategy may be appropriate in industries where firms are faced with strong pressures for cost reduction but with weak pressures for local responsiveness. Therefore, the strategy allows these firms to sell a standardized product worldwide. However, fixed costs (capital equipment) are substantial. Nevertheless, these firms are able to take advantage of scale economies and experience curve effects, because of the ability to mass-produce a standard product which can be exported—providing that demand is greater than the costs involved.

Global Trade Item Number (GTIN): A unique number that comprises up to 14 digits and is used to identify an item (product or service) upon which there is a need to retrieve pre-defined information that may be priced, ordered or invoiced at any point in the supply chain. The definition covers raw materials through end user products and includes services, all of which have pre-defined characteristics. GTIN is the globally-unique EAN.UCC System identification number, or key, used for trade items (products and services). It's used for uniquely identifying trade items (products and services) sold, delivered, warehoused, and billed throughout the retail and commercial distribution channels. Unlike a UPC number, which only provides information specific to a group of products, the GTIN gives each product its own specific identifying number, giving greater tracking accuracy.

Globalization: The process of making something worldwide in scope or application.

Going-concern Value: The value that a firm has as an entity, as opposed to the sum of the values of each of its parts taken separately; particularly important in determining what constitutes a reasonable railroad rate.

Gondola: A rail car with a flat platform and sides three to five feet high; used for top loading of items that are long and heavy.

LETTER G

Good Distribution Practices: Quality warranty system that provides guidelines for the proper distribution of medicinal products for human use. The guidelines cover such areas as requirements for purchase, receiving, storage, and export of drugs intended for human consumption. Good Distribution Practices are based on the Code of Federal Regulations 21 CFR, parts 210 and 211, and USP 1079.

Good Manufacturing Practices (GMP): Requirements governing the quality procedures of medical device manufacturers. Good Manufacturing Practices are based on the Code of Federal Regulations 21 CFR, parts 808, 812, and 820.

Goods: A term associated with more than one definition: 1) Common term indicating movable property, merchandise, or wares. 2) All materials which are used to satisfy demands. 3) Whole or part of the cargo received from the shipper, including any equipment supplied by the shipper.

Goods Received Note (GRN): Documentation raised by the recipient of materials or products.

Grandfather clause: A provision that enabled motor carriers engaged in lawful trucking operations before the passage of the Motor Carrier Act of 1935 to secure common carrier authority without proving public convenience and necessity; a similar provision exists for other modes.

Granger Laws: State laws passed before 1870 in Midwestern states to control rail transportation.

Graphics Interchange Format (GIF): A graphical file format commonly used to display indexed-color images on the World Wide Web. GIF is a compressed format, designed to minimize file transfer time over phone lines.

LETTER G

Great Lakes carriers: Water carriers that operate on the five Great lakes.

Green Field: A method used to launch a new process or initiative where no others of that type have previously existed.

Green Strategy: A comprehensive management plans that have the final goal of achieving environmental and economic sustainability. They are integrated, all-inclusive strategies that replace traditional single-issue policies.

Greenhouse Gas Emissions: The release of greenhouse gases into the atmosphere by human activities. Greenhouse Gases are identified as water vapor, carbon dioxide, methane, nitrous oxide, and ozone.

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GreenLane: A concept that would give C-TPAT members that demonstrate the highest standard of secure practices additional benefits for exceeding the minimum requirements of the program. GreenLane benefits would include expedited movement of cargo, especially during an incident of national significance.

Grid Technique: A quantitative technique to determine the least-cost center, given raw materials sources and markets, for locating a plant or warehouse.

Groupthink: A situation in which critical information is withheld from the team because individual members censor or restrain themselves, either because they believe their concerns are not worth discussing or because they are afraid of confrontation.

LETTER G/H

Gross Inventory: Value of inventory at standard cost before any reserves for excess and obsolete items are taken.

Gross Margin: The amount of contribution to the business enterprise, after paying for direct-fixed and direct- variable unit costs, required to cover overheads (fixed commitments) and provide a buffer for unknown items. It expresses the relationship between gross profit and sales revenue.

Gross National Product (GNP): A measure of a nation's output; the total value of all final goods and services produced during a period of time.

Gross weight: The total weight of the vehicle and the payload of freight or passengers.

GS1: The new name of EAN International. The GS1 US is the new name of the Uniform Code Council, Inc® (UCC®) the GS1 Member Organization for the U.S., the association that administrates UCS, WINS, and VICS and provides UCS identification codes and UPCs. GS1 subgroups also manage the standards for electronic product codes (EPCGlobal) and Rosettanet.

GTM: Global Trade Management

Guaranteed Loans: Loans made to railroads that are cosigned and guaranteed by the federal government.

Handling Costs: The cost involved in moving, transferring, preparing, and otherwise handling inventory.

Hard copy: Computer output printed on paper.

LETTER H

Harmonized Code: An international classification system that assigns identification numbers to specific products. The coding system ensures that all parties in int'l trade use a consistent classification for the purposes of documentation, statistical control, and duty assessment.

Haulage: The inland transport service which is offered by the carrier under the terms and conditions of the tariff and of the relative transport document.

Hawaiian carrier: A for-hire air carrier that operates within the state of Hawaii.

Hawthorne Effect: From a study conducted at the Hawthorne Plant of Western Electric Company in 1927-1932 which found that the act of showing people that you are concerned usually results in better job performance. Studying and monitoring of activities are typically seen as being concerned and results in improved productivity.

Hazardous Material: A substance or material, which the Department of Transportation has determined to be capable of posing a risk to health, safety, and property when stored or transported in commerce.
See also: *Material Data Safety Sheet*

Hedge Inventory: Excess inventories held to provide a buffer against risks associated with some contingent event. Events include price increases and availability reductions associated with work stoppages, plant shutdowns, disasters or acts of terrorism.

Heijunka: An element of the Toyota Production System that averages volume and sequence of scheduled items to provide level production and help enable just in time (JIT).

LETTER H

Hierarchy of Cost Assignability: In cost accounting, an approach to group activity costs at the level of an organization where they are incurred, or can be directly related to. Examples are the level where individual units are identified (unit-level), where batches of units are organized or processed (batch-level), where a process is operated or supported (process-level), or where costs cannot be objectively assigned to lower level activities or processes (facility-level). This approach is used to better understand the nature of the costs, including the level in the organization at which they are incurred, the level to which they can be initially assigned (attached) and the degree to which they are assignable to other activity and/or cost object levels, i.e. activity or cost object cost, or sustaining

High Availability Clusters (HA): A group of linked computers, connected through a fast local area network, that are implemented primarily for the purpose of providing high availability of services.

Highway Trust Fund: Federal highway use tax revenues are paid into this fund, and the federal government's share of highway construction is paid from the fund.

Highway Use Taxes: Taxes assessed by federal and state governments against users of the highway (the fuel tax is an example). The use tax money is used to pay for the construction, maintenance, and policing of highways.

Hi-low: Usually refers to a forklift truck on which the operator must stand rather than sit.

Home Page: The starting point for a website. It is the page that is retrieved and displayed by default when a user visits the website. The default home-page name for a server depends on the server's configuration. On many web servers, it is index.html or default.htm. Some web servers support multiple home pages.

LETTER H

Honeycomb Loss: When storing multiple SKUs in a single region, full utilization of all of the available space is not desirable because it could result in some items not being accessible. Honeycomb loss, the price paid for accessibility, is the unusable empty storage space in a lane or stack due to the storage of only a single SKU in each lane or stack since storing items from different SKUs would block access.

Honeycombing: 1) The practice of removing merchandise in pallet load quantities where the space is not exhausted in an orderly fashion. This results in inefficiencies due to the fact that the received merchandise may not be efficiently stored in the space which is created by the honey-combing. 2) The storing or withdrawal or supplies in a manner that results in vacant space that is not usable for storage of other items. 3) Creation of unoccupied space resulting from withdrawal of unit loads. This is one of the major hidden costs of warehousing.

Hopper cars: Rail cars that permit top loading and bottom unloading of bulk commodities; some hopper cars have permanent tops with hatches to provide protection against the elements.

Horizontal Collaboration: A practice where multiple shippers 'collaborate' with their primary carrier to create consolidated shipments which improve the total capacity utilization of a truck trailer (example) and reduce the per unit cost for each shipper. In some cases these shippers may even be competitors who each are shipping less than a full truckload to the same locations.

Horizontal Play/Horizontal Hub: This is a term for a function that cuts across many industries, usually defines a facility or organization that is providing a common service.

LETTER H

Hoshin Planning: Breakthrough planning. a step-by-step strategic planning process that assesses breakthrough strategic objectives against daily management tasks and activities. It provides a visual map at all levels of the organization provides clear strategic direction. a company develops up to four vision statements that indicate where the company should be in the next five years. Company goals and work plans are developed based on the vision statements. Periodic audits are then conducted to monitor progress.

Hostler: An individual employed to move trucks and trailers within a terminal or warehouse yard area.

Household Goods Warehouse: A warehouse that is used to store household goods.

Hub: 1) A large retailer or manufacturer having many trading partners. 2) A reference for a transportation network as in "hub and spoke" which is common in the airline and trucking industry. For example, a hub airport serves as the focal point for the origin and termination of long-distance flights where flights from outlying areas are fed into the hub airport for connecting flights. 3) A common connection point for devices in a network. 4) A Web "hub" is one of the initial names for what is now known as a "portal". It came from the creative idea of producing a website, which would contain many different "portal spots" (small boxes that looked like ads, with links to different yet related content). This content, combined with Internet technology, made this idea a milestone in the development and appearance of websites, primarily due to the ability to display a lot of useful content and store one's preferred information on a secured server. The web term "hub" was replaced with portal.

Hub Airport: An airport that serves as the focal point for the origin and termination of long-distance flights; flights from outlying areas are fed into the hub airport for connecting flights.

LETTER H

Human-machine Interface: Any point where data is communicated from a worker to a computer or from a computer to a worker. Data entry programs, inquire programs, reports, documents, LED displays, and voice commands are all examples of human-machine interfaces.

Human Factor Design: Incorporating scientific data on human physical capabilities into the design of equipment, products and systems.

Human Resources (HR): The function broadly responsible for personnel policies and practices within an organization.

Hundredweight (cwt): A pricing unit used in transportation (equal to 100 pounds).

Hurdle Rate: The required rate of return in a discounted cash flow analysis, above which an investment makes sense and below which it does not.

Hybrid Inventory System: An inventory system combining features multiple methodologies such as push and pull, fixed and variable / dynamic, etc.

Hyperinflation: Inflation that is out of control to the point that prices rise rapidly as currency loses its value.

Hyperlink: A computer term. Also referred to as "link". The text you find on a website which can be "clicked on" with a mouse which, in turn, will take you to another web page or a different area of the same web page. Hyperlinks are created or "coded" in HTML.

HyperText Markup Language (HTML): The standard language for describing the contents and appearance of pages on the World Wide Web.

LETTER H/I

HyperText Transport Protocol (HTTP): The Internet protocol that allows World Wide Web browsers to retrieve information from servers.

Igloos: Pallets and containers used in air transportation; the igloo shape is designed to fit the internal wall contours of a narrow-body airplane.

Image Processing: allows a company to take electronic photographs of documents. The electronic photograph then can be stored in a computer and retrieved from computer storage to replicate the document on a printer. The thousands of bytes of data composing a single document are encoded in an optical disk. Many carriers now use image processing to provide proof-of-delivery documents to a shipper. The consignee signs an electronic pad that automatically digitizes a consignee's signature for downloading into a computer. A copy of that signature then can be produced to demonstrate that a delivery took place.

Import: Movement of products from one country into another. The import of automobiles from Germany to the U.S. is an example.

Importation Point: The location (port, airport or border crossing) where goods will be cleared for importation into a country.

Import/Export License: Official authorization issued by a government agency which allows for the transport of goods across their national boundaries. Licenses may be required for all, or only specific classes of commodities.

Impressions: With regard to online advertising, it is the number of times an ad banner is downloaded and presumably seen by users. Guaranteed impressions refer to the minimum number of times an ad banner will be seen by users.

LETTER I

In Bond: Goods are held or transported In-Bond under customs control either until import duties or other charges are paid, or to avoid paying the duties or charges until a later date.

In-store implementation (ISI): Refers to the collective physical and informational actions performed at retail to actualize merchandising, marketing and media plans in the store. ISI encompasses compliance, measurement and communications activities, and is defined by a Plan-Do-Measure process cycle that controls implementation plans and work and communicates implementation signals.

Inbound Logistics: The movement of materials from suppliers and vendors into production processes or storage facilities.

Incentive Fee: A premium fee which is based upon the control of costs in a cost-plus-incentive-fee contract.

Incentive Rate: A rate designed to induce the shipper to ship heavier volumes per shipment.

INCOTERMS: International terms of sale developed by the International Chamber of Commerce to define sellers' and buyers' responsibilities.

Independent Action: A carrier that is a member of a rate bureau has the right to publish a rate that differs from the rate published by the rate bureau.

Independent Demand: In a requirements planning system the independent demand is that which is not related to a parent product in a product structure bill of materials or planning bill. Independent demand is typically end customer demand which must be separately forecast.

LETTER I

Independent Trading Exchange (ITE): Often used synonymously with B2B, e-marketplace or Virtual Commerce Network (VCN). ITE is a more precise term, connoting many-to-many transactions, whereas the others do not specify the transactions.

Indirect Cost: A resource or activity cost such as operation costs and overhead that cannot be directly traced to a final cost object since no direct or repeatable cause-and-effect relationship exists. An indirect cost uses an assignment or allocation to transfer cost.

Indirect/Distributor Channel: Your company sells and ships to the distributor. The distributor sells and ships to the end user. This may occur in multiple stages. Ultimately your products may pass through the Indirect/Distributor Channel and arrive at a retail outlet. Order information in this channel may be transmitted by electronic means. These means may include EDI, brokered systems, or linked electronic systems.

Indirect Retail Locations: A retail location that ultimately sells your product to consumers, but who purchases your products from an intermediary, like a distributor or wholesaler.

Infinite Loading: A method used in calculating work center activity loading where there are no constraints placed on the capacity of the work centers. In other words, the calculation assumes an infinite amount of capacity is available.

Information systems (IS): Managing the flow of data in an organization in a systematic, structured way to assist in planning, implementing, and controlling.

Inherent advantage: The cost and service benefits of one mode compared with other modes.

LETTER I

Initial Contact Personnel: The first point of contact that a customer has with a company.

Inland Bill of Lading: The carriage contract used in transport from a shipping point overland to the exporter's international carrier location.

Inland Carrier: An enterprise that offers overland service to or from a point of import or export.

Inland Port: An inland port is a site located away from traditional land, air and coastal borders. It facilitates and processes international trade through strategic investments in multimodal transportation assets and by promoting value-added services as goods move through the supply chain.

Insourcing: The opposite of outsourcing, that is, a service performed in-house.

Inspection Certificate: A document certifying that merchandise (such as perishable goods) was in good condition immediately prior to shipment.

Integrated Carrier: A company that offers a blend of transportation services such as land, sea and air carriage, freight forwarding, and ground handling.

Integrated Logistics: A comprehensive, system-wide view of the entire supply chain as a single process, from raw materials supply through finished goods distribution. All functions that make up the supply chain are managed as a single entity, rather than managing individual functions separately.

LETTER I

Intercorporate hauling: A private carrier hauling the goods of a subsidiary and charging the subsidiary a fee: this is legal if the subsidiary is wholly owned (100%) or if the private carrier has common carrier authority.

Interim Contract Support (ICS): Generally the initial, level of effort contract for support during System Development & Demonstration; produce and support to initial operational test and evaluation, initial spares and maintenance training.

Interleaving: The practice of assigning an employee multiple tasks which are performed concurrently. Frequently used to define the practice of assigning multiple picking orders to a single picker who will pick them concurrently as he/she moves down the aisle.

Interline: Two or more motor carriers working together to haul the shipment to a destination. Carrier equipment may be interchanged from one carrier to the next, but usually the shipment is rehandled without the equipment.

Intermediately Positioned Warehouse: A supplies depot located in a specific region of a country in order to provide a high level of customer service. It distributes commodities only for that area.

Intermittent-flow, fixed-path equipment: Materials handling devices that include cranes, monorails, and stacker cranes.

Intermodal Marketing Company (IMC): An intermediary that sells intermodal services to shippers.

Intermodal Transportation: Transporting freight by using two or more transportation modes such as by truck and rail or truck and oceangoing vessel.

LETTER I

Intermodal Container Transfer Facility: A facility where cargo is transferred from one mode of transportation to another, usually from ship or truck to rail.

Intermodal Marketing Company (IMC): An intermediary that sells intermodal services to shippers.

Intermodal Transport Unit (ITU): Container, swap body or semi-trailer/goods road motor vehicle suitable for intermodal transport.

Intermodal Transportation: Transporting freight by using two or more transportation modes such as by truck and rail or truck and oceangoing vessel.

Internal Customer: An individual or department which is a part of the supplying company as opposed to the companies external customers.

Internal Labor and Overhead: The portion of COGS that is typically reported as labor and overhead, less any costs already classified as "outsourced."

Internal Rate of Return (IRR): A rate of return used in capital budgeting to measure and compare the profitability of investments. The IRR is sometimes called the effective interest rate.

Internal Water Carriers: Water carriers that operate over internal, navigable rivers such as the Mississippi, Ohio, and Missouri.

International Air Transport Association (IATA): An international air carrier rate bureau for passenger and freight movements.

International Civil Aeronautics Organization (ICAO): An international agency that is responsible for air safety and for standardizing air traffic control, airport design, and safety features worldwide.

LETTER I

International Maritime Bureau (IMB): A special division of the International Chamber of Commerce.

International Maritime Organization (IMO): A United Nations-affiliated organization representing all maritime countries in matters affecting maritime transportation, including the movement of dangerous goods. The organization also is involved in deliberations on marine environmental pollution.

International Security, Trust and Privacy Alliance (ISTPA): A global alliance of companies and technology providers working together to clarify and resolve evolving issues related to security, trust and privacy.

International Ship and Port Facility Security Code (ISPS): Adopted by the IMO and based on the U.S. MTSA, came into force on July 1, 2004. It is a comprehensive, mandatory security regime for international shipping and port facility operations agreed to by the members of the IMO. Ships must be certified by their flag states to ensure that mandated security measures have been implemented; port facilities must undergo security vulnerability assessments that form the basis of security plans approved by their government authorities.

International Standards Organization (ISO): An organization within the United Nations to which all national and other standard setting bodies (should) defer. Develops and monitors international standards, including OSI, EDIFACT, and X.400

Internet: A computer term which refers to an interconnected group of computer networks from all parts of the world, i.e. a network of networks. Accessed via a modem and an on-line service provider, it contains many information resources and acts as a giant electronic message routing system.

LETTER I

Interstate Commerce: The transportation of persons or property between states; in the course of the movement, the shipment cresses a state boundary line.

Interstate Commerce Commission (ICC): An independent regulatory agency that implements federal economic regulations controlling railroads, motor carriers, pipelines, domestic water carriers, domestic surface freight forwarders, and brokers.

Interstate System: The United States National System of Interstate and Defense Highways, 42,000 miles of four- lane, limited-access roads connecting major population centers.

Intra-Manufacturing Re-plan Cycle: Average elapsed time, in calendar days, between the time a regenerated forecast is accepted by the end-product manufacturing/assembly location, and the time that the revised plan is reflected in the Master Production Schedule of all the affected internal sub-assembly/component producing plant(s). (An element of Total Supply Chain Response Time)

Intrastate Commerce: The transportation of persons or property between points within a state. A shipment between two points within a state may be interstate if the shipment had a prior or subsequent move outside of the state and the intent of the shipper was an interstate shipment at the time of shipment.

In-transit Inventory: Material moving between two or more locations, usually separated geographically; for example, finished goods being shipped from a plant to a distribution center. In-transit inventory is an easily overlooked component of total supply chain availability.

Intrinsic Forecast Method: A method of forecasting which looks at known available internal data (sales, usage, etc) as opposed to the factors external to the business (demographics, weather, etc.).

LETTER I

Inventory: Components, raw materials, work in process, finished goods and supplies required for the creation of goods and services; It can also refer to the number of units and/or value of the stock of goods held by a company.

Inventory Accuracy: This is when the on-hand quantity is equivalent to the perpetual balance (plus or minus the designated count tolerances). It can often be referred to as a percentage showing the variance between book inventory and actual count. This is a major performance metric for any organization which manages large inventories.
Note: Typical minimum and best practice averages would be 95% and 99%.

Inventory Balance Location Accuracy: When the on-hand quantity in the specified locations is equivalent to the perpetual balance (plus or minus the designated count tolerances).

Cont...

LETTER I

Inventory Carrying Cost: One of the elements comprising a company's total supply-chain management costs. These costs consist of the following:
Opportunity Cost : The opportunity cost of holding inventory. This should be based on your company's own cost of capital standards using the following formula.

Calculation: Cost of Capital x Average Net Value of Inventory

Shrinkage : The costs associated with breakage, pilferage, and deterioration of inventories. Usually pertains to the loss of material through handling damage, theft, or neglect.

Insurance and Taxes : The cost of insuring inventories and taxes associated with the holding of inventory.

Total Obsolescence for Raw Material, WIP, and Finished Goods Inventory : Inventory reserves taken due to obsolescence and scrap and includes products exceeding the shelf life, i.e. spoils and is no good for use in its original purpose (do not include reserves taken for Field Service Parts).

Channel Obsolescence : Aging allowances paid to channel partners, provisions for buy-back agreements, etc. Includes all material that goes obsolete while in a distribution channel. Usually, a distributor will demand a refund on material that goes bad (shelf life) or is no longer needed because of changing needs.

Field Service Parts Obsolescence : Reserves taken due to obsolescence and scrap. Field Service Parts are those inventory kept at locations outside the four walls of the manufacturing plant i.e., distribution center or warehouse.

LETTER I

Inventory Days of Supply (for RM, WIP, PFG, and FFG): Total gross value of inventory for the category (raw materials, work in process, partially finished goods, or fully-finished goods) at standard cost before reserves for excess and obsolescence, divided by the average daily usage. It includes only inventory that is on the books and currently owned by the business entity. Future liabilities such as consignments from suppliers are not included. Calculation: [5 Point Annual Average Gross Inventory] / [Calendar Year Value of Transfers / 365]

Inventory Deployment: A technique for strategically positioning inventory to meet customer service levels while minimizing inventory and storage levels. Excess inventory is replaced with information derived through monitoring supply, demand and inventory at rest as well as in motion.

Inventory Management: The process of ensuring the availability of products through inventory administration.

Inventory Planning Systems: The systems that help in strategically balancing the inventory policy and customer service levels throughout the supply chain. These systems calculate time-phased order quantities and safety stock, using selected inventory strategies. Some inventory planning systems conduct what-if analysis and that compares the current inventory policy with simulated inventory scenarios and improves the inventory ROI.

Inventory Turns: This ratio measures how many times a company's inventory has been sold (turned over) during a period of time. The cost of goods sold divided by the average level of inventory on hand. Operationally, inventory turns are measured as total throughput divided by average level of inventory for a given period; How many times a year the average inventory for a firm changes over, or is sold.

LETTER I

Inventory Velocity: The speed which inventory moves through a defined cycle (i.e., from receiving to shipping).

Invoice: A detailed statement showing goods sold and amounts for each. The invoice is prepared by the seller and acts as the document that the buyer will use to make payment.

Irregular route carrier: A motor carrier that is permitted to provide service utilizing any route.

ISO 9000: A series of quality assurance standards compiled by the Geneva, Switzerland-based International Standardization Organization. In the United States, ISO is represented by the American National Standards Institute based in Washington, D.C.

ISO 14000 Series Standards: A series of generic environmental management standards under development by the International Organization of Standardization, which provide structure and systems for managing environmental compliance with legislative and regulatory requirements and affect every aspect of a company's environmental operations.

IT: Information Technology.

Item: A uniquely identifiable piece of inventory. Also known as a part number or SKU, an item can be raw materials, fluids, component parts, subassemblies, finished assemblies, packaging, etc. Usually differentiated by form, fit or function. Items which are painted different colors are generally viewed as different items.

LETTER J

Java: A computer term for a general-purpose programming language created by Sun Microsystems. Java can be used to create Java applets. A Java program is downloaded from the web server and interpreted by a program running on the computer running the Web browser.

Java Applet: A computer term for a short program written in Java that is attached to a web page and executed by the computer on which the Web browser is installed.

Java Script: A computer term for a cross-platform, World Wide Web scripting language developed by Netscape Communications. JavaScript code is inserted directly into an HTML page.

Jidoka: The concept of adding an element of human judgment to automated equipment. In doing this, the equipment becomes capable of discriminating against unacceptable quality, and the automated process becomes more reliable. This concept, also known as autonomation, was pioneered by Sakichi Toyoda at the turn of the twentieth century when he invented automatic looms that stopped instantly when any thread broke. This permitted one operator to oversee many machines with no risk of producing large amounts of defective cloth. The term has since been extended beyond its original meaning to include any means of stopping production to prevent scrap (for example the andon cord which allows assembly-plant workers to stop the line), even where this capability is not built in to the production machine itself.

Joint Cost: A type of common cost where products are produced in fixed proportions, and the cost incurred to produce on product necessarily entails the production of another; the backhaul is an example.

LETTER J

Joint Depot Maintenance Activities Group (JDMAG): A U.S. DoD group that provides advice and support to the JG-DM. Maintains a web-site (www.jdmag.wpafb.af.mil/) that shows the Depot Maintenance Source of Repair decisions.

Joint Group on Depot Maintenance (JG-DM): The U.S. DoD flag level officers and civilians from each service that are responsible for depot maintenance. This group is responsible to review the depot maintenance function to achieve effective and affordable support for the nation's weapon systems.

Joint Photographic Expert Group (JPEG): A computer term which is an abbreviation for the Joint Photographic Expert Group. A graphical file format used to display high-resolution color images on the World Wide Web. JPEG images apply a user-specified compression scheme that can significantly reduce the large file size usually associated with photo-realistic color images. A higher level of compression results in lower image quality, whereas a lower level of compression results in higher image quality.

Joint Rate: A rate over a route that involves two or more carriers to transport the shipment.

Joint Supplier Agreement (JSA): Indicative of Stage 3 Sourcing Practices, the JSA includes terms & conditions, objectives, process flows, performance targets, flexibility, balancing and incentives.

Just-in-Time (JIT): An inventory control system that controls material flow into assembly and manufacturing plants by coordinating demand and supply to the point where desired materials arrive just in time for use. An inventory reduction strategy that feeds production lines with products delivered "just in time". Developed by the auto industry, it refers to shipping goods in smaller, more frequent lots.

LETTER J/K

Just-in-Time II (JIT II): Vendor-managed operations taking place within a customer's facility. JIT II was popularized by the Bose Corporation. The supplier reps, called "implants," place orders to their own companies, relieving the customer's buyers from this task. Many also become involved at a deeper level, such as participating in new product development projects, manufacturing planning (concurrent planning).

Kaizen: Taken from the Japanese words “kai” (change) and “zen” (good) literally “changes than make our product better”. The popular meaning has grown to include continual improvement of all areas of a company and not just quality. A business philosophy of continuous cost, quality problems, and delivery time reductions through rapid, team-based improvement activities.

Kaizen Blitz: A rapid improvement. This is a focused activity on a particular process or activity. The basic concept is to identify and quickly remove waste.

Kanban: Japanese word for "visible record", loosely translated means card, billboard or sign. Popularized by Toyota Corporation, it uses standard containers or lot sizes to deliver needed parts to assembly line "just in time" for use. Empty containers are then returned to the source as a signal to resupply the associated parts in the specified quantity. Some modern IT systems use “Electronic Kanbans”, which are messages to the upstream step advising of the need for parts downstream.

Keiretsu: A set of closely related independent companies with interlocking business relationships and shareholdings. It is a type of business group with a common set of objectives similar to a consortium.

Key Custodians: The persons, assigned by the security administrators of trading partners, that send or receive a component of either the master key or exchange key used to encrypt data encryption keys. This control technique involves dual control, with split knowledge that requires two key custodians.

LETTER K/L

Key Performance Indicator (KPI): A measure which is of strategic importance to a company or department. For example, a supply chain flexibility metric is Supplier On-time Delivery Performance which indicates the percentage of orders that are fulfilled on or before the original requested date.

Kitting: Light assembly of components or parts into defined units ahead of production issue or customer shipment. Kitting reduces the need to maintain an inventory of pre-built completed products, but increases the time and labor consumed at shipment.

Knock Down: A flat, unformed cardboard box or tray. Knock-downs, also known as KDs, are constructed and glued in the recoup or packaging areas and used for repacked product. Many KDs are provided by the customer for their recouped products.

Knowledge Management System (KMS): Generally an IT based system for managing knowledge in organizations for supporting creation, capture, storage and dissemination of information. A KMS can be a tool to provide common operating instructions to workers across large and even smaller organizations, improving the application of standards.

Labor Management System (LMS): A software solution which provides a means of defining / documenting the most appropriate means of performing a process or task, provides an engineered methodology for calculating standard which show how long a task should take to complete and includes tools which can be used for planning activities and reporting actual performance against standards.

Lading: The cargo carried in a transportation vehicle.

LETTER L

Land Bridge: The movement of containers by ship-rail-sip on Japan-to-Europe moves; ships move containers to the
U.S. Pacific Coast, rails move containers to an East Coast port, and ships deliver containers to Europe.

Land Grants: Grants of land given to railroads during their developmental stage to build tracks.

Landed Cost: Cost of product plus relevant logistics costs such as transportation, warehousing, handling, etc.
Synonym: ***Total Landed Cost***
Synonym: ***Net Landed Costs***

Lane: A major origin-destination pair, i.e., traffic lane , an origin-destination pairing. A manufacturer in Chicago ships to a destination in New York, producing the Chicago to New York traffic lane.

Lash Barges: Covered barges that are loaded on board oceangoing ships for movement to foreign destinations.

Last In, First Out (LIFO): Accounting method of valuing inventory that assumes that the latest goods purchased during a given accounting period are also the first goods used. Popular where acquisition costs are rising and jurisdictions impose a tax on the value of inventory.

Lead Logistics Partner (LLP): An organization that organizes other 3rd party logistics partners for outsourcing of logistics functions. An LLP serves as the client's primary supply chain management provider, defining processes and managing the provision and integration of logistics services through its own organization and those of its subcontractors.

LETTER L

Lead Time: The total time that elapses between an order's placement and its receipt. It includes the time required for order transmittal, order processing, order preparation, and transit. Variants are supplier lead time, manufacturing / assembly lead time, and customer order lead time.

Lead Time from Complete Manufacture to Customer Receipt: Includes time from when an order is ready for shipment to customer receipt of order. Time from complete manufacture to customer receipt including the following elements: pick/pack time, prepare for shipment, total transit time (all components to consolidation point), consolidation, queue time, and additional transit time to customer receipt.

Lead Time from Order Receipt to Complete Manufacture: Includes times from order receipt to order entry complete, from order entry complete to start to build, and from start to build to ready for shipment. Time from order receipt to order entry complete includes the following elements: order revalidation, configuration check, credit check, and scheduling. Time from order entry complete to start to build includes the following elements: customer wait time and engineering and design time. Time from start to build to ready for shipment includes the following elements: release to manufacturing or distribution, order configuration verification, production scheduling, and build or configure time.

Leadership in Energy and Environmental Design (LEED): A building rating system, developed by the U.S. Green Building Council (USGBC), to provide a set of standards for environmentally sustainable construction.

Lean: A business management philosophy that considers the expenditure of resources for any goal other than the creation of value for the end customer to be wasteful, and thus a target for elimination.

LETTER L

Learning Management System: A software packaging for delivering, tracking and managing training and education within a company or organization.

Least Total Cost: Similar to the Economic Order Quantity method of lot sizing, LTC is based on the idea that total cost will be least when the carrying cost and ordering cost are essentially equal.

Least Unit Cost: A lot-sizing method where a specified number of future periods requirements are consolidated in an effort to find a quantity where the total of ordering and carrying costs per unit ordered is at its lowest.

Leg: A portion of a complete trip which has an origin, destination, and carrier and is composed of all consecutive segments of a route booked through the same carrier.

Legacy: A computer term that describes an old computer system or application program that continues to be used because it still meets the user's needs.

Less-Than-Carload (LCL): Shipment that is less than a complete rail car load (lot shipment).

Less-Than-Truckload (LTL) Carriers: Trucking companies that consolidate and transport smaller (less than truckload) shipments of freight by utilizing a network of terminals and relay points.

Lessee: A person or firm to whom a lease is granted.

Lessor: A person or firm that grants a lease.

LETTER L

Letter of credit: An international business document that assures the seller that payment will be made by the bank issuing the letter of credit upon fulfillment of the sales agreement.

Leverage: Taking something small and exploding it. Can be financial or technological.

License Plate (LPN): A pallet tag. Refers to a uniquely numbered bar code sticker placed on a pallet of product. The tag typically contains information about product on the pallet which is entered, or electronically loaded from an ASN, into the inventory control system for tracking purposes. In some environments the “unique number” is the incoming GS1 label’s Serial Shipping Container Code (SSCC), in other the receiving group will print and apply an internal number bar code tag.

Life Cycle Cost (LCC): In cost accounting, a product's life cycle is the period that starts with the initial product conceptualization and ends with the withdrawal of the product from the marketplace and final disposition. A product life cycle is characterized by certain defined stages, including research, development, introduction, maturity, decline, and abandonment. Life cycle cost is the accumulated costs incurred by a product during these stages.

Lift-On Lift-Off: In ocean shipping, LO-LO refers to a vessel of which the loading and discharging operations are carried out by cranes and derricks.

Lift Truck: Vehicles used to lift, move, stack, rack, or otherwise manipulate loads. Material handling people use a lot of terms to describe lift trucks, some terms describe specific types of vehicles, others are slang terms or trade names that people often mistakenly use to describe trucks. Terms include industrial truck, forklift, reach truck, motorized pallet trucks, turret trucks, counterbalanced forklift, walkie, rider, walkie rider, walkie stacker, straddle lift, side loader, order pickers, high lift, cherry picker. Some operations refer to these assets by the name of the manufacturer such as: Jeep, Towmotor, Yale, Crown, Hyster, Raymond, Clark, Drexel.

LETTER L

Lighter: A flat-bottomed boat designed for cross-harbor or inland waterway freight transfer. While the terms barge and lighter are used interchangeably, a barge usually refers to a vessel used for a long haul, while a lighter is used for a short haul.

Line-haul Shipment: A shipment that moves between cities and distances over 100 to 150 miles.

Line: 1) An area within a production or assembly facility where manufacturing occurs in a linear fashion, passing products through one level of completion on to the next process. 2) a unique item order line on a customer or purchase order.

Line Functions: The decision-making areas associated with daily operations. Logistics line functions include traffic management, inventory control, order processing, warehousing, and packaging.

Line Scrap: Value of raw materials and work-in-process inventory scrapped as a result of improper processing or assembly, as a percentage of total value of production at standard cost.

Liner Service: International water carriers that ply fixed routes on published schedules.

Link: The transportation method used to connect the nodes (plants, warehouses) in a logistics system.

Linked Distributed Systems: Independent computer systems, owned by independent organizations, linked in a manner to allow direct updates to be made to one system by another. For example, a customer's computer system is linked to a supplier's system, and the customer can create orders or releases directly in the supplier's system.

LETTER L

Little Inch: A federally built pipeline constructed during World War II that connected Corpus Christi, Texas and Houston, Texas.

Live: A situation in which the equipment operator stays with the trailer or boxcar while it is being loaded or unloaded.

Load Factor: A measure of operating efficiency used by air carriers to determine the percentage of a plane's capacity that is utilized, or the number of passengers divided by the total number of seats.

Load Tender (Pick-Up Request): An offer of cargo for transport by a shipper. Load tender terminology is primarily used in the motor industry.

Load Tendering: The practice of providing a carrier with detailed information and negotiated pricing (the tender) prior to scheduling pickup. This practice can help assure contract compliance and facilitate automated payments (self billing).

Loading Allowance: A reduced rate offered to shippers and/or consignees who load and/or unload LTL or AQ shipments.

Loading Port: The port where the cargo is loaded onto the exporting vessel. This port must be reported on the Shipper's Export Declaration, Schedule D and is used by U.S. companies to determine which tariff is used to freight rate the cargo for carriers with more than one tariff.

Local Area Network (LAN): A data communications network spanning a limited geographical area, usually a few miles at most, providing communications between computers and peripheral devices.

Local Rate: A rate published between two points served by one carrier.

LETTER L

Local Service Carriers: An air carrier classification of carriers that operate between areas of lesser and major population centers. These carriers feed passengers into the major cities to major hubs.

Location Grid: A layout of the warehouse or storage yard used to enhance the management of efficient put away, pick, and inventory cycle counting. A high level view of warehouse locations or a general template used to map out a storage yard.

Location Tag: A bar coded label applied to shelves or racking, or a sign that hangs above or on a warehouse location. The location number can be read from the tag or scanned with an RF gun.

Locational Determinant: The factors that determine the location of a facility. For industrial facilities, the determinants include logistics.

Locator System: Locator systems are inventory-tracking systems that allow you to assign specific physical locations to your inventory to facilitate greater tracking and the ability to store product randomly. Location functionality in software can range from a simple text field attached to an item that notes a single location, to systems that allow multiple locations per item and track inventory quantities by location. Warehouse management systems (WMS) take locator systems to the next level by adding functionality to direct the movement between locations.

Lockbox: A method for receiving payments where customers make their remittance directly to a bank or other financial institution rather than to the invoicing company. The bank then applies the funds received directly to the company's account, and provides the company with a listing (printed or electronic) of all the payments received.

LETTER L

Logbook: A daily record of the hours an interstate driver spends driving, off, duty, sleeping in the berth, or on duty but not driving.

Logistics: The process of planning, implementing, and controlling procedures for the efficient and effective transportation and storage of goods including services, and related information from the point of origin to the point of consumption for the purpose of conforming to customer requirements. This definition includes inbound, outbound, internal, and external movements.

Logistics Chain Manager: Plans appropriation of logistics chain resources to meet logistics chain requirements.

Logistics Channel: The network of supply chain participants engaged in storage, handling, transfer, transportation, and communications functions that contribute to the efficient flow of goods.

Logistics Data Interchange (LDI): A computerized system to electronically transmit logistics information.

Logistics Service Provider (LSP): Any business which provides logistics services. Includes those businesses typically referred to as 3PL, 4PL, LLP, etc. Services may include provisioning, transport, warehousing, packaging, etc.

Long Ton: Equals 2,240 pounds.

LETTER L

Lost Sale: The simple definition is a potential sale (usually a customer order) which was not completed (usually due to availability). However this is a grey area and very dependent on how the individual enterprise defines it. Many refer to abandoned website shopping cart quantities as lost sales, even though the customer may only have been browsing. This highlights the difficulty in defining the term – if the customer shows a desire for a product but does not purchase it immediately, was the sale really "lost". Did the customer satisfy their desire elsewhere or with a different product from your own store, or did they simply postpone a decision? Were they perhaps simply "kicking tires"? The answer is quite elusive. In an ideal world we would like to see more regarding the reason for the lost sale – product did not meet requirement, price too high, not available when needed, etc. – but this information is generally not available. A lost sale is not a backorder because the backorder will ship when available – unless of course the customer does not accept backorders, or cancels the order before it ships.

Lot Control: A method of tracking production lots used primarily to manage potential recalls. Typically unique lot or batch numbers are assigned to each group of products manufactured and tracking systems are established to monitor the destination of the products when sold.

Lot-for-Lot: A method used in lot-sizing where production orders are created in quantities which match the net requirements for the manufacturing cycle.

Lot Size: Set quantity of goods to be purchased or produced at one time in anticipation of use or sale in the future.

Lumping: A term applied to a person who assists a motor carrier owner-operator in the loading and unloading of property: quite commonly used in the food industry.

LETTER M

Machine Downtimes: Time during which a machine cannot be utilized. Machine downtimes may occur during breakdowns, maintenance, changeovers, etc. Downtime is tracked or estimated for use as a component of capacity planning systems.

Machine-to-Machine interface (M2M): A term describing the process whereby machines are remotely monitored for status and problems reported and resolved automatically or maintenance scheduled by the monitoring systems.

Macro Environment: 1) Major external and uncontrollable factors that influence an organization's decision making, and affect its performance and strategies. These factors include the economic, demographics, legal, political, and social conditions, technological changes, and natural forces. 2) Factors that influence a company's or product's development but that are outside of the company's control. For example, the macro environment could include competitors, changes in interest rates, changes in cultural tastes, or government regulations.

Mail Shop: An service provider which specializes in preparing materials for mailing by affixing labels, sorting for bulk rates, preparing bag tags, bagging, etc..

Mainframe: A term sometimes generically used to refer to an organization's central computer system. Specifically the more precise definition refers to the largest class of computer systems manufactured.

Maintenance, Repair, and Operating supplies (MRO): 1) Any activity – such as tests, measurements, replacements, adjustments and repairs — intended to retain or restore a functional unit in or to a specified state in which the unit can perform its required functions. 2) A category of software designed to support asset maintenance and management, also sometimes referred to as Computerized Maintenance Management Systems (CMMS)

LETTER M

Major carrier: A for-hire certificated air carrier that has annual operating revenues of $1 billion or more: the carrier usually operates between major population centers.

Make-or-buy decision: Business decision that compares the costs and benefits of manufacturing a product or product component against purchasing it. If the purchase price is higher than what it would cost the manufacturer to make it, or if the manufacturer has excess capacity that could be used for that product, or the manufacturer's suppliers are unreliable, then the manufacturer may choose to make the product. This assumes the manufacturer has the necessary skills and equipment necessary, access to raw materials, and the ability to meet its own product standards. A company who chooses to make rather than buy is at risk of losing alternative sources, design flexibility, and access to technological innovations.

Make-to-Order (Manufacture-to-order): A manufacturing process strategy where the trigger to begin manufacture of a product is an actual customer order or release, rather than a market forecast. For Make-to-Order products, more than 20% of the value-added takes place after the receipt of the order or release, and all necessary design and process documentation is available at time of order receipt.

Make-to-Stock (Manufacture-to-stock): A manufacturing process strategy where finished product is continually held in plant or warehouse inventory to fulfill expected incoming orders or releases based on a forecast.

Manifest: A document which describes individual orders contained within a shipment. The manifest is used as a guide for the carrier showing consignee, number of cases or pallets, shipment number, commodity type, weight, etc.., but not details about products.

Manufacture Cycle Time: The average time between commencement and completion of a manufacturing process, as it applies to make-to-stock or make-to-order products. Typically does not include engineering or testing time.

LETTER M

Manufacturer's Representative: An individual or organizations which provides sales and marketing services for one or more other firms who actually manufacture the product. A manufacturer’s rep typically does not take ownership of the products, and in many cases does not even handle them.

Manufacturing Calendar: A tool used in the production environment to note capacity available by working day. While it may resemble the traditional calendar with a representation of month and days, the unique features are the units of capacity available and the ability to block specific days, shifts or work periods. Calendars are set by work center to allow for differing schedules.

Manufacturing Capital Asset Value: The asset value of the "Manufacturing fixed assets" after allowance for depreciation. Examples of equipment are SMT placement machines, conveyors, Auto guided vehicles, robot cells, testers, X-ray solder machines, Burn-in chambers, Logic testers, Auto packing equipment, PLC station controllers, Scanning equipment, PWB magazines.

Manufacturing Critical-Path Time (MCT): The typical amount of calendar time from when a manufacturing order is created through the critical-path until the first, single piece of that order is delivered to the customer.

Manufacturing Execution Systems (MES): A system designed to manage and monitor work-in-process on the factory floor including manual or automatic labor and production reporting, as well as on-line inquiries and links to tasks that take place on the production floor. Manufacturing Execution Systems may include one or more links to work orders, receipt of goods, shipping, quality control, maintenance, scheduling or other related tasks.

LETTER M

Manufacturing Lead Time: The total length of time used to process raw materials and components through all upper levels in the bill of material to an end item. It specifies the total of all individual elements of lead time—such as order preparation, queue, setup, run, inspection, etc.—used for and indicative of a projected availability date for an end item if all lowest level raw material is on hand.

Manufacturing Resource Planning (MRP II): The extension of closed-loop MRP that includes and integrates financial and simulation systems. It includes all organizational functions related to long-term strategic and business planning, demand planning, materials planning, resource planning, and production and vendor scheduling and execution. It assumes the use of a base, integrated system and the sharing of a common database and operating parameters by all functions and departments.

Mapping: A computer term referring to diagramming data that is to be exchanged electronically, including how it is to be used and what business management systems need it. Preliminary step for developing an applications link. Performed by the functional manager responsible for a business management system.

Marginal Analysis: The accounting activity of analyzing the various elements contributing to the margin or difference between revenue and costs.

Marginal Cost: The cost to produce one additional unit of output. The change in total variable cost resulting from a one-unit change in output.

Marine Insurance: Insurance to protect against cargo loss and damage when shipping by water transportation.

Maritime Administration: A federal agency that promotes the merchant marine, determines ocean ship routes and services, and awards maritime subsidies.

LETTER M

Maritime Transportation Security Act (MTSA): Law passed in 2002 to create a comprehensive national system of transportation security enhancements. The MTSA designated the U.S. Coast Guard as the lead federal agency for maritime homeland security and requires federal agencies, ports, and vessel owners to take numerous steps to upgrade security. The MTSA requires the Coast Guard to develop national and regional area maritime transportation security plans and requires seaports, waterfront terminals, and vessels to submit security and incident response plans to the Coast Guard for approval. The MTSA also requires the Coast Guard to conduct antiterrorism assessments of certain foreign ports.

Market-Positioned Warehouse: A Warehouse located in a geographic area containing a high population of customers, used to provide a ready source of products available the same day or next day to ordering customers in a manner more economical than overnight package shipments.

Market Demand: An estimated demand for a product/service within a given market demographic and time period.

Market Discovery Process: An evaluation and determination of attractive markets (by size and entry requirements).

Market Dominance: In transportation rating this refers to the absence of effective competition for railroads from other carriers and modes for the traffic to which the rate applies. The Staggers Act stated that market dominance does not exist if the rate is below the revenue-to-variable-cost ratio of 160% in 1981 and 170% in 1983.

Market Intelligence: The process of gathering and analyzing information about a company's market to better understand customer's wants and needs and to identify possible threats and opportunities to the company.

LETTER M

Market Segment: Market Segment: a group of people or organizations sharing one or more characteristics causing them to have similar product and/or service needs. A true market segment meets all of the following criteria: it is distinct from other segments (different segments have different needs), it is homogeneous within the segment (exhibits common needs); it responds similarly to a market stimulus, and it can be reached by a market intervention. The term is also used when consumers with identical product and/or service needs are divided up into groups so they can be charged different amounts. These can broadly be viewed as 'positive' and 'negative' applications of the same idea, splitting up the market into smaller groups.

Market Share: The portion of the overall market demand for a specific product or service which is provided by any single provider.

Market Strategy: A guide developed for an organization that details how to concentrate its limited resources on the greatest opportunities to increase sales and achieve a sustainable competitive advantage.

Marks and Numbers: Identifying marks and numbers affixed to or placed on goods used to identify a shipment or parts of a shipment.

Marquis Partners: Key strategic relationships. This has emerged as perhaps the key competitive advantage and barrier to entry of e-marketplaces. Get the big players in the fold first, offering equity if necessary.

Marshaller or Marshalling Agent: This is a service unique to international trade and relates to an individual or firm that specializes in one or more of the activities preceding Main Carriage, such as consolidation, packing, marking, sorting of merchandise, inspection, storage, etc. References state that Marshaling Agent, Consolidation Agent and Freight Forwarder all have the same meaning.

LETTER M

Mass Customization: A phrase used in marketing, manufacturing, call centers and management referring to the use of flexible computer-aided manufacturing systems to produce custom output. Those systems combine the low unit costs of mass production processes with the flexibility of individual customization. At its core is a tremendous increase in variety and customization without a corresponding increase in costs.

Master Pack: A large box that is used to pack a number of smaller boxes or containers. Aids in protecting the smaller cartons or packages and reduces the number of cartons to be handled during the material handling process.

Master Production Schedule (MPS): The master level or top level schedule used to set the production plan in a manufacturing facility.

Cont...

LETTER M

Material Acquisition Costs: One of the elements comprising a company's total supply-chain management costs. These costs consist of the following:
Materials (Commodity) Management and Planning : All costs associated with supplier sourcing, contract negotiation and qualification, and the preparation, placement, and tracking of a purchase order, including all costs related to buyer/planners.
Supplier Quality Engineering : The costs associated with the determination, development/certification, and monitoring of suppliers' capabilities to fully satisfy the applicable quality and regulatory requirements.
Inbound Freight and Duties : Freight costs associated with the movement of material from a vendor to the buyer and the associated administrative tasks. Duties are those fees and taxes levied by government for moving purchased material across international borders. Customs broker fees should also be considered in this category.
Receiving and Put Away : All costs associated with taking possession of material and storing it. Note that carrying costs are not a part of acquisition, and inspection is handled separately.
Incoming Inspection : All costs associated with the inspection and testing of received materials to verify compliance with specifications.

Material Process and Component Engineering : Those tasks required to document and communicate component specifications, as well as reviews to improve the manufacturability of the purchased item.

Tooling : Those costs associated with the design, development, and depreciation of the tooling required to produce a purchased item. A tooling cost would be incurred by a company if they actually paid for equipment and/or maintenance for a contract manufacturer that makes their product. Sometimes, there isn't enough incentive for a contract manufacturer to upgrade plant equipment to a level of quality that a company requires, so the company will pay for the upgrades and maintenance to ensure high quality. May not be common in some industries such as the Chemicals.

LETTER M

Material Index: The ratio of the sum of the localized raw material weights to the weight of the finished product.

Material Safety Data Sheet (MSDS): A form containing data regarding the properties of a particular substance. An important component of product stewardship and workplace safety, it is intended to provide workers and emergency personnel with procedures for handling or working with that substance in a safe manner, and includes information such as physical data (melting point, boiling point, flash point, etc.), toxicity, health effects, first aid, reactivity, storage, disposal, protective equipment, and spill handling procedures. The exact format of an MSDS can vary from source to source within a country depending on how specific is the national requirement.
See also: *Hazardous Materials*

Materials Handling: The physical handling of products and materials between procurement and shipping.

Materials Management: Inbound logistics from suppliers through the production process. The movement and management of materials and products from procurement through production.

Materials Planning: The materials management function that attempts to coordinate the supply of materials with the demand for materials.

Materials Requirements Planning (MRP): A decision-making methodology used to determine the timing and quantities of materials to purchase.

LETTER M

Maturity Level: An identifiable stage, defined in terms of process features, towards achieving a mature process. Maturity levels are commonly represented in 5 stages, for example the SEI Capability Maturity Model defines the following levels – Ad Hoc, Repeatable, Definable, Managed, and Optimized.

Matrix Organizational Structure: A type of organizational management in which people with similar skills are pooled for work assignments. For example, all engineers may be in one engineering department and report to an engineering manager, but these same engineers may be assigned to different projects and report to a project manager while working on that project. Therefore, each engineer may have to work under several managers to get their job done.

MAX: The lowest inventory quantity that is desired at a ship to location or selling location. This quantity will over- ride the forecast number if the forecast climbs above the MAX. Maximum stock

Maximum Competitive Tension: Market analysis and intelligence development that describes the different pressures that can be exerted on competitors.

Maximum Inventory: The prescribed maximum level of inventory allowed for a specific item. Set into the item database, it is used in min/max calculations.

Maximum Order Quantity: The maximum quantity allowed when ordering a specific item. Typically a value which is calculated and set into the system for a period of time.

LETTER M

m-Commerce: Mobile commerce applications involve using a mobile phone to carry out financial transactions. This usually means making a payment for goods or transferring funds electronically. Transferring money between accounts and paying for purchases are electronic commerce applications. An emerging application, electronic commerce has been facilitated by developments in other areas in the mobile world, such as dual slot phones and other smarter terminals and more standardized protocols, which allow greater interactivity and therefore more sophisticate services.

Mean: For a data set, the mean is the sum of the observations divided by the number of observations.

Mean Time Between Failures (MTBF): The average time between failures in a system.

Measure: A number used to quantify a metric, showing the result of part of a process often resulting from a simple count. An example can be the number of units shipped.

Measurement Plans: A tool through which can evaluate the success of a program on an ongoing basis.

Measurement ton: Equals 40 cubic feet; used in water transportation rate making.

Median: A median is described as the number separating the higher half of a sample, a population, or a probability distribution, from the lower half. It is the mid-point of the list of numbers as opposed to the average.

LETTER M

Merge in Transit: The process of combining or "merging" shipments from multiple suppliers which are going directly to the buyer or to the store, bypassing the seller. Effectively this is a "drop shipment" from several vendors to one buyer, which is being combined at an intermediary point prior to delivery.

Merger: The combination of two or more carriers into one company for the ownership, management, and operation of the properties previously operated on a separate basis.

Message: The EDIFACT term for a transaction set. A message is the collection of data, organized in segments, exchanged by trading partners engaged in EDI. Typically, a message is an electronic version of a document associated with a common business transaction, such as a purchase order or shipping notice. A message begins with a message header segment, which identifies the start of the message (e.g., the series of characters representing one purchase order). The message header segment also carries the message type code, which identifies the business transaction type. EDIFACT's message header segment is called UNH; in ANSI X12 protocol, the message header is called ST. A message ends with a message trailer segment, which signals the end of the message (e.g., the end of one purchase order). EDIFACT's message trailer is labeled UNT; the ANSI X12 message trailer is referred to as SE.

Meta Tag: An optional HTML tag that is used to specify information about a web document. Some search engines use "spiders" to index web pages. These spiders read the information contained within a page's META tag. So in theory, an HTML or web page author has the ability to control how their site is indexed by search engines and how and when it will "come up" on a user's search. The META tag can also be used to specify an HTTP or URL address for the page to "jump" to after a certain amount of time. This is known as Client-Pull. What this means, is a web page author can control the amount of time a web page is up on the screen as well as where the browser will go next.

LETTER M

Metrics: Specific areas of measurement. A metric must be quantitative, must support benchmarking, and must be based on broad, statistically valid data. Therefore, it must exist in a format for which published data exists within the enterprise or industry.

Micro-land Bridge: An intermodal movement in which the shipment is moved from a foreign country to the U.S. by water and then moved across the U.S. by railroad to an interior, nonport city, or vice versa for exports from a nonport city.

Middleware: A type of software that is able to connect disparate software components or applications. Typically used to provided a level of integration between software components where were acquired from different developers.

MIL Specs: Military Specifications.

Mileage Allowance: An allowance based upon distance and given by railroads to shippers using private rail cars.

Mileage Rate: A rate based upon the number of miles the commodity is shipped.

Milestone: The set of specific deadlines or measurement / decisions points which are used to progress in completing an Initiative. Milestones include specific completion dates or rates.

LETTER M

Milk run: Delivery method for mixed loads from different suppliers. Instead of each of several (say 5) suppliers sending a vehicle every week to meet the weekly needs of a customer, one vehicle visits each supplier on a daily basis and picks up deliveries for that customer. This way, while still five vehicle loads are shipped every week, each vehicle load delivers the full daily requirements of the customer from each supplier. This method gets its name from the dairy industry practice where one tanker collects milk every day from several dairy farmers for delivery to a milk processing firm.

Mini-land Bridge: An intermodal movement in which the shipment is moved from a foreign country to the U.S. by water and then moved across the U.S. by railroad to a destination that is a port city, or vice versa for exports from a U.S. port city.

Min-Max System: A replenishment and inventory management system that sets a minimum inventory level, used to trigger a reorder when the available plus incoming receipt total is less than the min. The amount of the order is the difference between the calculated (less than min) inventory and a predefined max. Min-max systems are typically not time-phased.

Minimum Weight: The shipment weight specified by the carrier's tariff as the minimum weight required to use the TL or CL rate; the rate discount volume.

Mirroring: A computer term that describes an exact copy of a data set.

Misguided Capacity Plans: Plans or forecasts for capacity utilization, which are based on inaccurate assumptions or input data.

Mitigation Strategies: Additional efforts required in the event management must take action to lower the likelihood of risk occurring and/or minimize the impact on the program if the risk did occur.

LETTER M

Mixed Loads: The movement of both regulated and exempt commodities in the same vehicle at the same time.

Modal Split: The relative use made of the modes of transportation; the statistics used include ton-miles, passenger- miles, and revenue.

Modular Product/Service: A product or service which can be acquired as individual parts or assembled into a group.

MOTE: (as in reMOTE) A wireless receiver/transmitter that is typically combined with a sensor of some type to create a remote sensor. Motes are being used in ocean containers to look for evidence of tampering. They have huge application in food, pharmacy, and other “cold chain” industries to closely monitor temperature, humidity and other factor.

Motor Carrier: An enterprise that offers service via land motor carriage.

Move Ticket: A document used to move inventory within a facility. Warehouse management systems use move tickets to direct and track material movements. In a paperless environment the electronic version of a move ticket is often called a task or a trip.

Muda: A Japanese term for waste, used in Lean management.

Multi-Currency: The ability to process orders using a variety of currencies for pricing and billing.

Multinational company: A company that both produces and markets products in different countries.

LETTER M/N

Multiple-car rate: A railroad rate that is lower for shipping more than one carload rather than just one carload at a time.

Multi-Skilled: Pertaining to individuals who are certified to perform a variety of tasks.

Mura: Japanese term for inconsistency or unevenness in a process.

Muri: Japanese term for straining or overburdening a process

National Carrier: A for-hire certificated air carrier that has annual operating revenues of $75 million to $1 billion; the carrier usually operates between major population centers and areas of lesser population.

National Industrial Traffic League (NITL): An association representing the interests of shippers and receivers in matters of transportation policy and regulation.

National Institute of Standards and Technology (NIST): A federal technology agency that develops and promotes measurement, standards, and technology within the United States.

National Motor Bus Operators Organization: An industry association representing common and charter bus firms; now known as the American Bus Association.

National Motor Freight Classification (NMFC): A tariff, which contains descriptions and classifications of commodities and rules for domestic movement by motor carriers in the U.S.

LETTER N

National Railroad Corporation: Also known as Amtrak, the corporation established by the Rail Passenger Service Act of 1970 to operate most of the United States' rail passenger service.

National Stock Number (NSN): A 13-digit numeric code, identifying all the 'standardized material items of supply' as they have been recognized by the United States Department of Defense. Pursuant to the NATO Standardization Agreements (STANAGs), the NSN has come to be used in all treaty countries, where it is also known as a NATO Stock Number. Many countries that use the NSN program are not members of NATO i.e. Japan, Australia and New Zealand. A two-digit Material Management Aggregation Code (MMAC) suffix may also be appended, to denote asset end use but it is not considered part of the NSN. An item having an NSN is said to be "stock-listed".

Nationalization: Public ownership, financing, and operation of a business entity.

Nesting: The practice of separating multiple products in a single warehouse location by using drawers or trays which contain bins or slots for each product. In these cases a WMS may refer to the tray / drawer location only, requiring the material handler to visually select the correct bin within the location.

Net Asset Turns: The number of times you replenish your net assets in your annual sales cycle. A measure of how quickly assets are used to generate sales.

Net Assets: Total Net assets are calculated as Total Assets - Total Liabilities; where: The total assets are made up of fixed assets (plant, machinery and equipment) and current assets which is the total of stock, debtors and cash (also includes A/R, inventory, prepaid assets, deferred assets, intangibles and goodwill). The total liabilities are made up in much the same way of long-term liabilities and current liabilities (includes A/P, accrued expenses, deferred liabilities).

LETTER N

Net Change MRP: An MRP or other planning system generation that recalculates requirements only for items that have changed since the last generation, due to the addition or changes in order quantities and dates, inventory levels, bill of material or routings, lead times or other parameters. A flag is usually set by programs that initiate changes for those items, which is used by MRP as the basis to regenerate them. It typically reduces generation time and is most useful for companies that have many part numbers, a small percentage of which are active in a given week.

Net Landed Costs: The cost of the product in addition to the relevant logistics cost such as transportation and handling.

Net Present Value (NPV): A financial measure of performance for long term projects. The net present value is a calculation of a time series of future cash flows in today's (current year) dollars.

Net Requirements: The requirements for an item based on its gross requirements (from forecasts, customer orders or upper level demand), minus stock already on-hand and scheduled receipts.

Net Weight: The weight of the merchandise, unpacked, exclusive of any containers.

Network Model: A database model created to represent objects and their relationships in a flexible way.

Network Optimization: A process or methodology to make a network as fully perfect, functional, effective or efficient as possible. The use of mathematics may be involved to find the best solution.

Network Planning: An inventory distribution or transportation planning strategy which attempts to optimize the time/cost of travel or cost of holding inventory across multiple sites.

LETTER N

New Product Introduction (NPI): The process used to develop products that are new to the sales portfolio of a company.

Nixie: A direct mail letter which has been returned to the sender because the address was wrong. Also, any undelivered piece of mail. Nixies are used to correct a mailing list.

No location (No Loc): A received item for which the warehouse has no previously established storage slot.

Node: A fixed point in a firm's logistics system where goods come to rest; includes plants, warehouses, supply sources, and markets.

Non-Certified Carrier: A for-hire air carrier that is exempt from economic regulation.

Non-Compliance: Failure or refusal to do as requested by higher authority or as prescribed by a set of rules that describe correct procedure to follow (i.e., rules on hazardous waste disposal).

Non-Conveyable: Materials which cannot be moved on a conveyor belt.

Non-Durable goods: Goods whose service life is considered to be less than three years.

LETTER N

Non-Intrusive Inspection Technology (NII): Originally developed to address the threat of smugglers using increasingly sophisticated techniques to conceal narcotics deep in commercial cargo and conveyances, NII systems, in many cases, give Customs inspectors the capability to perform thorough examinations of cargo without having to resort to the costly, time consuming process of unloading cargo for manual searches, or intrusive examinations of conveyances by methods such as drilling and dismantling.

Non-Vessel-Owning Common Carrier (NVOCC): A firm that offers the same services as an ocean carrier, but which does not own or operate a vessel. NVOCCs usually act as consolidators, accepting small shipments (LCL) and consolidating them into full container loads. They also consolidate and disperse international containers that originate at or are bound for inland ports. They then act as a shipper, tendering the containers to ocean common carriers. They are required to file tariffs with the Federal Maritime Commission and are subject to the same laws and statutes that apply to primary common carriers.

Nonconformity: A quality management event that captures the failure to meet specified inspection or testing requirements.

North American Container System (NACS): An Intermodal equipment program designed to facilitate the free interchange of domestic 48’ and 53’ containers between member railroads.

North American Free Trade Agreement (NAFTA): A free trade agreement, implemented January 1, 1994, between Canada, the United States and Mexico. It includes measures for the elimination of tariffs and non-tariff barriers to trade, as well as many more specific provisions concerning the conduct of trade and investment that reduce the scope for government intervention in managing trade.

LETTER N/O

Not Otherwise Specified / Not Elsewhere Specified: This term often appears in ocean or airfreight tariffs respectively. If no rate for the specific commodity shipped appears in the tariff, then a general class rate (for example: printed matter NES) will apply. Such rates usually are higher than rates for specific commodities.

Obeya: Japanese word for "big room", similar in concept to a traditional "war room," and containing charts and graphs which show milestones and progress to date, problem resolution activities, etc. A command center type atmosphere.

Object Linking and Embedding (OLE): An object system created by Microsoft. OLE lets an author invoke different editor components to create a compound document.

Obsolescence: A loss in the utility or value of property that results over time from intrinsic limitations (as outmoded facilities) or external circumstances.

Obsolete Inventory: Inventory for which there is no forecast demand expected. A condition of being out of date. A loss of value occasioned by new developments that place the older property at a competitive disadvantage.

Ocean Bill of Lading: The bill of lading issued by the ocean carrier to its customer.

Occupational Safety and Health Administration (OSHA): A United States Department of Labor Agency whose mission is the prevention of work-related injuries, illnesses, and death.

Offline: A computer term which describes work done outside of the computer system or outside of a main process within the corporate system. In general usage this term describes any situation where equipment is not available for use, or individuals cannot be contacted.

LETTER O

Offshoring: The practice of moving domestic operations such as manufacturing to another country.

Omni-Channel: Distribution strategy that includes multiple methods of capture and delivery of merchandise to the customer. Channels covered typically include distribution to a DC, Retail Store, and direct to Consumer with order coming via traditional Purchase Orders, EDI, Web and Phone. All forms may ship from a single DC, but it could also include consumer store pick-up such as Walmart's "Site to Store" program, and shipment direct to a consumer from a retail location vs. a distribution center.

On-Demand: Pertaining to work performed when demand is present. Typically used to describe products which are manufactured or assembled only when a customer order is placed. Considered to be a component of the "Lean" methodology, however On Demand has been in practice long before Lean became populate. May also refer to computer applications which are accessed remotely via a subscription service where charges for use are incurred as opposed to paying a set period fee.

On-Hand Balance: 1) The 'book' quantity recorded in the inventory records. 2) The 'physical' quantity as can be actually counted in the storage location(s).

On-line Receiving: A system in which computer terminals are available at each receiving bay and operators enter items into the system as they are unloaded.

On Order: The amount of goods that has yet to arrive at a location or retail store. This includes all open purchase orders including, but not limited to, orders in transit, orders being picked, and orders being processed through customer service.

On Time Delivery: A metric defined as % of orders received on time by the by the company from its suppliers (inbound), or delivered on time to the company's customers (outbound).

LETTER O

On Time In Full (OTIF): Sales order delivery performance measure which can be expressed as a target, say, of achieving 98% of orders delivered in full, no part shipments, on the requested date.

One-Way Networks: The advantages generally live with either the seller or buyer, but not both. B2C websites are one-way networks.

One Piece Flow: Moving parts through a process in batches of one.

One Up / One Down: A new International Standards Organization (ISO) Food Traceability Standard that requires each company to know who their immediate supplier is and to whom the product is being shipped. Also, the Bioterrorism Act of 2002 requires One Up/One Down traceability for each link in the supply chain.

Online: A computer term which describes activities performed using computer systems.

Open-to-Buy (OTB): A retail category management technique which identifies merchandise budgeted for purchase during a certain time period that has not yet been ordered. It is also the process of planning merchandise sales and purchases. OTB budgets are typically set by commodity group rather than supplier.

Open-to-Receive: A retail category management technique which identifies how much merchandise you can receive based on inventory levels and sales for a period. It tells you how much inventory should be on hand at the beginning of any given period and how much new merchandise should be received during the period.

Operational Availability: The percent of time that a system is available for a mission or the ability to sustain operations tempo.

LETTER O

Operational Performance Measurements: The set of performance measures (metrics) used to monitory activity in the operational area of the business. These include those related employee and machine productivity in the areas of receiving, warehouse management, manufacturing and assembly, inventory management, fulfillment.

Operating Ratio: A measure of operation efficiency. Calculation: (Operating expenses / Operating revenues) x 100

Optimization: The process of making something as good or as effective as possible with given resources and constraints.

Option: In the area of product management an option is a functional capability of the product which can be included at the discretion of the buyer. The option could be a physical component, a color choice or a software feature. Options can be related in such a way that if “A” is chosen then “B” must be too, or if “A” is chosen “B” cannot be also.

Optional Replenishment Model: An optional replenishment model similar to the fixed order period model. In this model, unless inventory has dropped below a prescribed level when the order period has elapsed, no order is placed. Intended to protect against placing very small orders it is attractive when review and ordering costs are large.

Order: A type of request for goods or services such as a purchase order, sales order, work order, etc.

Order Batching: Practice of compiling and collecting orders before they are sent in to the manufacturer.

LETTER O

Order Complete Manufacture to Customer Receipt of Order: Average lead time from when an order is ready for shipment to customer receipt of order, including the following sub-elements: pick/pack time, preparation for shipment, total transit time for all components to consolidation point, consolidation, queue time, and additional transit time to customer receipt. (An element of Order Fulfillment Lead-Time).

Order Consolidation Profile: The activities associated with filling a customer order by bringing together in one physical place all of the line items ordered by the customer. Some of these may come directly from the production line others may be picked from stock.

Order Cycle: The time and process involved from the placement of an order to the receipt of the shipment.

Order Entry and Scheduling: The process of receiving orders from the customer and entering them into a company's order processing system. Orders can be received through phone, fax, or electronic media. Activities may include "technically" examining orders to ensure an orderable configuration and provide accurate price, checking the customer's credit and accepting payment (optionally), identifying and reserving inventory (both on hand and scheduled), and committing and scheduling a delivery date.

Order Entry Complete to Start Manufacture: Average lead-time from completion of customer order to the time manufacturing begins, including the following sub-elements: order wait time, engineering and design time.

Order Exchange (OE) System: A system designed to transfer orders to a more applicable area or department within a company or store. For returns, this process would update the system to acknowledge the product needs to be restocked (if product is not defective) and a credit is processed to the customer.

LETTER O

Order Fulfillment Lead Times: Average, consistently achieved lead-time from customer order origination to customer order receipt, for a particular manufacturing process strategy (Make-to-Stock, Make-to-Order, Configure/Package-to-Order, Engineer-to-Order). Excess lead-time created by orders placed in advance of typical lead times (Blanket Orders, Annual Contracts, Volume Purchase Agreements, etc.), is excluded.

Order Interval: The set period of time which controls order placement in a fixed order point model.

Order Management: The process of managing activities involved in customer orders, manufacturing orders, and purchase orders. For customer orders this includes order entry, picking, packing, shipping, and billing. For manufacturing it includes order release, routing, production monitoring, and receipt to inventory. For POs the activities are order placement, monitoring, receiving, and acceptance.

Cont...

LETTER O

Order Management Costs: One of the elements comprising a company's total supply-chain management costs.
These costs consist of the following:
New Product Release Phase-In and Maintenance : This includes costs associated with releasing new products to the field, maintaining released products, assigning product ID, defining configurations and packaging, publishing availability schedules, release letters and updates, and maintaining product databases.
Create Customer Order : This includes costs associated with creating and pricing configurations to order and preparing customer order documents.
Order Entry and Maintenance : This includes costs associated with maintaining the customer database, credit check, accepting new orders, and adding them to the order system as well as later order modifications.
Contract/Program and Channel Management : This includes costs related to contract negotiation, monitoring progress, and reporting against the customer's contract, including administration of performance or warranty related issues.
Installation Planning : This includes costs associated with installation engineering, scheduling and modification, handling cancellations, and planning the installation.
Order Fulfillment : This includes costs associated with order processing, inventory allocation, ordering from internal or external suppliers, shipment scheduling, order status reporting, and shipment initiation.
Distribution : This includes costs associated with warehouse space and management, finished goods receiving and stocking, processing shipments, picking and consolidating, selecting carrier, and staging products/systems.
Transportation, Outbound Freight and Duties : This includes costs associated with all company paid freight duties from point-of-manufacture to end-customer or channel.
Installation : This includes costs associated with verification of site preparation, installation, certification, and authorization of billing.
Customer Invoicing/Accounting : This includes costs associated with invoicing, processing customer payments, and verification of customer receipt.

LETTER O

Order Picking: The function of gathering the items associated with an order from their storage locations in order to make them available to be included in production processes or to customers.

Order Point - Order Quantity System: The inventory method that places an order for a lot whenever the quantity on hand is reduced to a predetermined level known as the order point.

Order Processing: Activities associated with accepting and filling customer orders.

Order Promising: : The act of agreeing to a customer's stated requirements for delivery of products or services to be provided in a given quantity on a given date.

Order Receipt to Order Entry Complete: Average lead-time from receipt of a customer order to the time that order entry is complete, including the following sub-elements: order revalidation, product configuration check, credit check, and order scheduling.

Origin: The place where a shipment begins its movement.

Original Equipment Manufacturer (OEM): The rebranding of equipment and selling it under another name, or as a component of another product. OEM refers to the company that made the products (the "original" manufacturer), but with the growth of outsourcing, eventually became widely used to refer to the organization that buys the products and resells them. This term has two generally acceptable definitions which are actually opposites of each other and may vary by industry: 1) The OEM reseller is often the designer of the equipment (which is made to order). An example would be a computer manufacturer OEM which includes components built by other manufacturers, and 2) Companies that make products for others to repackage and sell, or to incorporate into a final assembly.

LETTER O

ORM-D: A marking for mail or shipping in the United States that identifies "Other Regulated Materials-Domestic." Packages are materials such as a consumer commodity, which although is subject to the regulations presents a limited hazard during transportation due to its form, quantity and packaging.

OSHA: See *Occupational Safety and Health Administration*

Out Of Stock: The state of not having inventory at a location and available for distribution or for sell to the consumer (zero inventory).

Outbound Consolidation: Consolidation of a number of small shipments for various customers into a larger load. The large load is then shipped to a location near the customers where it is broken down and then the small shipments are distributed to the customers. This can reduce overall shipping charges where many small packet or parcel shipments are handled each day.

Outbound Logistics: The process related to the movement and storage of products from the end of the production line to the end user.

Outgate: The process of checking a container or trailer out of an intermodal facility. The process includes inspection of the unit, input of data into a computer system.

Outlier: In statistical analysis an outlier refers to a data point that is statistically different from the main body, either significantly high or low. y from other data for a similar phenomenon. An example would be where the average monthly usage of a item is 100 and one of the months in the average set is 500.

LETTER O

Outpartnering: A variant of outsourcing seen primarily in the healthcare industry, Outpartnering is characterized by close working relationships between buyers and suppliers as a source of knowledge, expertise, and complementary core competencies.

Outsource: To utilize a third-party provider to perform services previously performed in-house. Examples include manufacturing of products and call center/customer support.

Outsourced Cost of Goods Sold: Operations performed on raw material outside of the responding entity's organization that would typically be considered internal to the entity's manufacturing cycle. Outsourced cost of goods sold captures the value of all outsourced activities that roll up as cost of goods sold. Some examples of commonly outsourced areas are assembly by subcontract houses, test, metal finishing or painting, and specialized assembly process.

Over, short and damaged (OS&D): This is typically a report issued at warehouse when goods received are more or less than indicated by the packing slip, or are damaged. Used to file claim with carrier.

Over-the-road: A motor carrier operation that reflects long-distance, intercity moves; the opposite of local operations.

Overall Equipment Effectiveness (OEE): A measure of overall equipment effectiveness that takes into account machine availability & performance as well as output quality.

Overpack: The practice of using a large box or carton to contain multiple smaller packages which are all going to the same destination in order to achieve a reduced overall shipping cost vs. the individual packages.

LETTER O/P

Owner-operator (OO): A trucking operation in which the opener of the truck is also the driver.

Pack Out: In a fulfillment environment this refers to the operations involved in packaging and palletizing individual units of product for introduction into the warehouse distribution environment. For example, a contract 3PL may received or assemble units of product which need to be placed into retail packaging, then overpacked with a carton and then palletized.

Package to Order: A postponement strategy where products are received in bulk or manufactured without final packaging to allow for a variety of packaging options for a single product. An example is where a product is shipped to retailers with packaging designed specifically for the individual retailer.

Packaging Indicator (PI): The first digit of the U.P.C. shipping container (EAN/UCC128) code that identifies the packaging level.

Packing and Marking: Sometimes referred to as preservation, packaging and marking, these are the activities related to packing for shipping by placing goods into designated containers, and labeling (marking) the container with customer prescribed destination and other information.

Packing List: List showing merchandise packed and all particulars. Normally prepared by shipper but not required by carriers. Copy is sent to consignee to help verify shipment received, it may be inside of the box or attached to the outside in a clear envelope. The physical equivalent of the electronic Advanced Ship Notice (ASN).

LETTER P

Pallet: The platform which cartons are stacked on and then used for shipment or movement as a group. Pallets may be made of wood or composite materials. Some pallets have electronic tracking tags (RFID) and most are recycled in some manner.

Pallet Jack: Material handling equipment consisting of two broad parallel pallet forks on small wheels used in the warehouse to move pallets of product, but not having the lifting capability of a forklift. It may be a motorized unit guided by an operator who stands on a platform; or it may be a motorized or manual unit guided by an operator who is walking behind or beside it. Comes as a "single" (one pallet) or "double" (two pallets).

Pallet Rack: A single or multi-level structural storage system that is utilized to support high stacking of single items or palletized loads.

Pallet Tag: The bar coded sticker that is placed on a unit load or partial load, typically at receiving. The pallet tag can be scanned with an RF gun.
Synonym: *License Plate or "LPN"*

Pallet Ticket: A document attached to a pallet, showing the description, part number, and quantity of the item contained on the pallet.

Pallet Wrapping Machine: A machine that wraps a pallet's contents in stretch-wrap to ensure safe shipment.

Parcel Case Strapping: The act of consolidating two or more individual cartons or cases of a shipment together with strapping, to form one single unit in an effort to improve efficiency and reduce costs.

LETTER P

Parcel Shipment: Parcels include small packages like those typically handled by providers such as UPS and FedEx.

Pareto: Named after Vilfredo Pareto, a means of sorting data for example. For example, number of quality faults by frequency of occurrence. An analysis that compares cumulative percentages of the rank ordering of costs, cost drivers, profits or other attributes to determine whether a minority of elements have a disproportionate impact. Another example, identifying that 20 percent of a set of independent variables is responsible for 80 percent of the effect.

Part Period Balancing (PPB): A lot size technique that uses look ahead and look back functions to consider additional periods in modifying an initial calculation based on least total cost.

Part Standardization: A strategy designed to eliminate excessive SKU counts (part numbers) from inventory control systems though the use of common parts and components. Also knows as ‘rationalizing’.

Passenger-mile: A measure of output for passenger transportation; it reflects the number of passengers transported and the distance traveled; a multiplication of passengers hauled and distance traveled.

Password: A private code required to gain access to a computer, an application program, or service.

Past Performance Automated Information System (PPAIS): A U.S. DoD central database that allows program managers and contracting officials to review the past performance records of potential bidders.

LETTER P

Path to Profitability (P2P): The step-by-step model to generate earnings.

Pattern Recognition: A technique of looking at raw data and classifying it based on either experience or statistical information drawn out from the patterns.

Pay-on-Use: Pay-on-Use is a process where payment is initiated by product consumption, i.e., consignment stock based on withdrawal of product from inventory. This process is popular with many European companies.

Payment: The transfer of money, or other agreed upon medium, for provision of goods or services.

Payroll: Total of all fully burdened labor costs, including wage, fringe, benefits, overtime, bonus, and profit sharing.

P & D: Pickup and delivery.

Peak demand: The time period during which the quantity demanded is greater than during any other comparable time period.

Peer to Peer (P2P): A computer networking environment which allows individual computers to share resources and data without passing through an intermediate network server.

Pegged Requirement: An MRP component demand quantity which is linked to demand at a higher level (parent or subassembly).

LETTER P

Pegging: A technique in which a ERP system traces demand for a product by date, quantity, and warehouse location.

Per Diem: 1) The rate of payment for use by one railroad of the cars of another. 2) A daily rate of reimbursement for expenses.

Percent of Fill: Number of lines or quantity actually shipped as a percent of the original order.

Perfect Order: The definition of a perfect order is one which meets all of the following criteria: Delivered complete, with all items on the order in the quantity requested.
Delivered on time to customer's re-quest date, using the customer's definition of on-time delivery.
Delivered with complete and accurate documentation supporting the order, including packing slips, bills of lading, and invoices.
Delivered in perfect condition with the correct configuration, customer ready, without damage, and faultlessly in-stalled (as applicable).

Perfect Order Index (POI): A value which is calculated by cross-multiplying the criteria which are a part of the perfect order. Calculation: (Percent on Time) x (Percent Complete) x (Percent Damage Free) x (Percent Complete Documentation)

Performance-Based Logistics (PBL): Originally a U.S. Government program, PBL that describes the purchase of assets with a complete package of services and support as an integrated, affordable, performance package designed to optimize system readiness and meet performance goals for a weapon system through long-term support arrangements with clear lines of authority and responsibility.

LETTER P

Performance and Event Management Systems: The systems that report on the key measurements in the supply chain -- inventory days of supply, delivery performance, order cycle times, capacity use, etc. Using this information to identify causal relationships to suggest actions in line with the business goals.

Performance Measurement Program: A performance measurement program goes beyond just having performance metrics in place. Many companies do not realize the full benefit of their performance metrics because they often do not have all of the necessary elements in place that support their metrics.
Typical characteristics of a good performance measurement program include the following: Metrics that are aligned to strategy and linked to the “shop floor” or line level workers
A process and culture that drives performance and accountability to delivery performance against key performance indicators.
An incentive plan that is tied to performance goals, objectives and metrics
Tools/technology in place to support easy data collection and use. This often includes the use of a “dashboard” or “scorecard” to allow for ease of understanding and reporting against key performance indicators.

Performance Measurement Units: Specific measurements such as time, cost, error rates, accuracy rates, and milestones.

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Performance Measures: Indicators of the work performed and the results achieved in an activity, process, or organizational unit. Performance measures should be both non-financial and financial. Performance measures enable periodic comparisons and benchmarking. For example, a common performance measure for a distribution center is % of order fill rate.
Attributes of good performance measurement include the following:
Measures only what is important: The measure focuses on key aspects of process performance
Can be collected economically: Processes and activities are designed to easily capture the relevant information
Are visible: The measure and its causal effects are readily available to everyone who is measured Is easy to understand: The measure conveys at a glance what it is measuring and how it is derived
Is process oriented: The measure makes the proper trade-offs among utilization, productivity and performance
Is defined and mutually understood. The measure has been defined and mutually understood by all key parties (internal and external)
Facilitates trust: The measure validates the participation among various parties and discourages "game playing"
Are usable: The measure is used to show progress and not just data that is "collected". Indicated performance vs. data

Period Order Quantity: A lot size technique that suggests orders with quantities that cover requirements for a variable number of periods based on order and holding costs, as opposed to a fixed period quantity that uses a standard number of periods.

Permanent Storage: Permanent storage is an area of the warehouse used for (or the goods themselves) a class of goods intended to be in storage for longer than 90 days.

LETTER P

Permit: A grant of authority to operate as a contract carrier.

Perpetual Inventory: The system of record-keeping where book inventory is tracking by recording all receipts issues and adjustments as they occur. Records may be kept manually on logs or stock cards, or in a computer database.

Phantom Bill of Material: A BOM for a product or group of parts that is not normally built and stocked, but is immediately used in production. MRP processors ignore the phantom and instead include the component parts in production orders and for planning purposes. A phantom BOM is often used for convenience where a set of parts has identical usage across many bills of material.

Physical Distribution: The movement and storage functions associated with finished goods from manufacturing plants to warehouses and to customers; also, used synonymously with business logistics.

Physical Supply: The movement and storage functions associated with raw materials from supply sources to the manufacturing facility.

Pick-by-Light: A laser identifies the bin for the next item in the rack; when the picker completes the pick, the bar code is scanned and the system then points the laser at the next bin.

Pick/Pack: Picking of product from inventory and packing into shipment containers.

Pick-to-Clear: A method often used in warehouse management systems that directs picking to the locations with the smallest quantities on hand.

LETTER P

Pick-to-Carton: Pick-to-carton logic uses item dimensions/weights to select the shipping carton prior to the order picking process. Items are then picked directly into the shipping carton.

Pick-to-Light: Pick-to light systems consist of lights and LED displays for each pick location. The system uses software to light the next pick and display the quantity to pick.

Pick-to-Trailer: Order-picking method where the order picker transports the materials directly from the pick location to the trailer without any interim checking or staging steps.

Pick-Up Order: document indicating the authority to pick up cargo or equipment from a specific location.

Pick and Pass: Pick and pass involves segregating your DC pick area into pick zones where the operators perform picks only in the zones assigned to them and the order picking container travels (is passed) from one zone to another using conveyors or pick carts reducing the travel time for pickers.

Pick List: A list of items to be picked from stock in order to fill an order; the pick list generation and the picking method can be quite sophisticated.

Pick Module: A dedicated area specifically designed to enhance pick operations, usually supported by a belt conveyor to move picked products to a packaging / shipping area. Pick modules are often multi-level rack structures using pallet or case flow storage and pick-to-light systems.

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Pick on Receipt: Product is receipted and picked in one operation (movement); therefore the product never actually touches the ground within the warehouse. It is unloaded from one vehicle and re-loaded on an outbound vehicle. Related to Cross Docking.

Picking: The operations involved in pulling products from storage areas to complete a customer order.

Picking by Aisle: A method by which pickers pick all needed items in an aisle regardless of the items' ultimate destination; the items must be sorted later. A component of Wave Picking.

Picking by Source: A method in which pickers successively pick all items going to a particular destination regardless of the aisle in which each item is located.

Pickup and Delivery (P&D): A type of transportation, usually local, where the carrier follows a regular route making deliveries and picking up shipment.

Piece Count: Number of individual cases, packages or bundles in an intermodal trailer or container.

Piggyback: Terminology used to describe a truck trailer being transported on a railroad flatcar.

Pin Lock: A hard piece of iron, formed to fit on a trailer's pin that locks in place with a key to prevent an unauthorized person from moving the trailer.

Place Utility: A value created in a product by changing its location. Transportation creates place utility.

LETTER P

Plaintext: Data before it has been encrypted or after it has been decrypted, e.g., an ASCII text file.

Plan Deliver: The development and establishment of courses of action over specified time periods that represent a projected appropriation of supply resources to meet delivery requirements.

Plan-Do-Check-Action (PDCA): A four step quality improvement cycle, based on a process described by Walter Shewhart, that involves continuous improvement based on analysis, design, execution and evaluation. Sometimes referred to as plan/do/study/act, it emphasizes the constant attention and reaction to factors that affect quality.

Plan for Every Part (PEFP): A component of lean strategies for purchased parts. To introduce such a system, you have to understand everything about every part: How each part is purchased, received, packaged, stored, and delivered to its point of use. In fact, much of this information exists in your organization, but it is stored in many different places under the control of many managers and is mostly invisible. The first step in creating a lean material handling system for purchased parts is collect all of the necessary parts information in one place.

Plan Make: The development and establishment of courses of action over specified time periods that represent a projected appropriation of production resources to meet production requirements.

Plan Source: The development and establishment of courses of action over specified time periods that represent a projected appropriation of material resources to meet supply chain requirements.

LETTER P

Plan Stability: The difference between planned production and actual production, as a percentage of planned production. [(Sum of Monthly Production Plans) + Calculation: (Sum of the absolute value of the difference between planned and actual)] / [Sum of Monthly Production Plans]

Planned Date: The date an operation, such as a receipt, shipment, or delivery of an order is planned to occur.

Planned Order: An order proposed by an MRP system to cover forecast demand in a future period. Planned orders will changes dynamically over time to accommodate changes in forecasts and actual usage until they become 'firm planned orders' either through manual intervention or by virtue of the associated period moving within a planning horizon. The next step in the process would be to create an actual purchase or production order.

Planned Receipt: Any line item on an open purchase or production order which has been scheduled but not yet received into stock.

Planning Bill of Material: A BOM which has been created facilitate the practice of forecasting by family group rather than by individual product. It specifies the products as components and the expected percent of each in terms of overall family usage or sales. The MRP system will then use the family level forecast to derive individual product forecasts using the relative percentages.

Planning Horizon: In an MRP system this is the length of time into the future (number of periods or days) for which the planning system will generate requirements. The horizon should be set long enough out to accommodate the longest cumulative lead time for any item in the population.

LETTER P

Planning Time Fence: A point, usually a set length of time beyond the current date, used as a boundary for making changes in a planning system. It is used to stabilize the master production schedule by allowing various changes to planned orders only beyond the fence however changes under certain circumstances can be made within the fence.

Planogram: The end result of analyzing the sales data of an item or group of items to determine the best arrangement of products on a store shelf. The process determines which shelf your top-selling product should be displayed on, the number of facings it gets, and what best to surround it with. It results in graphical picture or map of the allotted shelf space along with a specification of the facing and deep.

Plant Finished Goods: Finished goods inventory held at the end manufacturing location.

Point-of-Purchase (POP): A retail sales term referring to the area where a sale occurs, such as the checkout counter. POP is also used to refer to the displays and other sales promotion tools located at a checkout counter.

Point-of-use Delivery: This is when components are delivered directly to where they will be used instead of stored in inventory in a warehouse or distribution center.

Point-of-use Inventory: Material used in production processes that is physically stored where it is consumed.

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Point Of Sale (POS): 1) The time and place at which a sale occurs, such as a cash register in a retail operation, or the order confirmation screen in an on-line session. Supply chain partners are interested in capturing data at the POS, because it is a true record of the sale rather than being derived from other information such as inventory movement. 2) Also a national network of merchant terminals, at which customers can use client cards and personal security codes to make purchases. Transactions are directed against client deposit accounts. POS terminals are sophisticated cryptographic devices, with complex key management processes. POS standards draw on ABM network experiences and possess extremely stringent security requirements.

Point of Sale Information: Price and quantity data from retail locations as sales transactions occur.

Poka Yoke (mistake-proof): The application of simple techniques that prevent process quality failure. A mechanism that either prevents a mistake from being made or makes the mistake obvious at a glance.

Police Powers: The United States constitutionally granted right or the states to establish regulations to protect the health and welfare of its citizens; truck weight, speed, length, and height laws are examples.

Pooling: A shipping term for the practice of combining shipment from multiple shippers into a truckload in order to reduce shipping charges.

Pop-Up Store: A retail store front operation which is created to meet a short term consumer demand. Typical manifestations of this are stores in retail malls which are opened in late fall to address Christmas shoppers needs, and close in mid-January following any post-Christmas clearance and returns business.

LETTER P

Port: A harbor, airport or other facility where ships will anchor, planes will land or trucks and trains will enter.

Port Authority: A state or local government that owns, operates, or otherwise provides wharf, dock, and other terminal investments at ports.

Port of Discharge: Port where vessel is off loaded.

Port of Entry: A port at which foreign goods are admitted into the receiving country.

Port of Loading: Port where cargo is loaded aboard the vessel.

Portal: Websites that serve as starting points to other destinations or activities on the Internet. Initially thought of as a "home base" type of web page, portals attempt to provide all Internet needs in one location. Portals commonly provide services such as e-mail, online chat forums, shopping, searching, content, and news feeds.

Possession utility: The value created by marketing's effort to increase the desire to possess a good or benefit from a service.

Post-Deduct Inventory Transaction Processing: A method of inventory bookkeeping where the book (computer) inventory of components is reduced after issue. When compared to a real-time process, this approach has the disadvantage of a built-in differential between the book record and what is physically in stock. Consumption can be based on recorded actual use, or calculated using finished quantity received times the standard BOM quantity (backflush).

LETTER P

Postponement: The delay of final activities (i.e., assembly, production, packaging, etc.) until the latest possible time. A strategy used to eliminate excess inventory in the form of finished goods which may be packaged in a variety of configurations and to maximize the opportunity to provide a customized end product to the customer.

Power-By-the-Hour (PBH): Under PBH, an hourly rate is negotiated and the contractor is paid in advance based on the forecasted operational hours for the system. Actual hours are reconciled with projected hours and overages and shortfalls are either added to or credited from the next period's forecasted amounts. Since the contractor receives funding independent of failures he is then incentivized to overhaul the asset the first time it fails so it stays in operation as long as possible. Bottom line: under the PBH concept, the fewer times the contractor touches a unit, the more money he makes.

Pre-Bid Supplier Qualification Evaluation: Preliminary audit of new suppliers which helps to identify capacity of suppliers, their responsibility to fulfill contract requirements and ability to meet with specifications defined in system of quality controlling and in the principles of supplier's policy.

Pre-Deduct Inventory Transaction Processing: A technique used in inventory management where the book inventory is reduced prior to the actual physical action. This can apply to receipts and issues where the transaction is completed as soon as the order is released to production or received onto the dock.

Pre-Expediting: The act of making an inquiry about an open order as a way of ensuring that delivery is going to be made per agreement.

LETTER P

Pre-Receiving: A process that allows companies to prepare for the reception of incoming materials, products, and goods. Pre-receiving allows companies to pay for the materials before receipt to determine how the incoming supplies will be stored or used.

Predictive Maintenance: Regularly scheduled maintenance activities and practices that seek to prevent unscheduled machinery downtime by collecting and analyzing data on equipment conditions. The analysis is then used to predict time-to-failure, plan maintenance, and restore machinery to good operating condition. Predictive maintenance systems typically measure parameters on machine operations, such as vibration, heat, pressure, noise, and lubricant condition. In conjunction with computerized maintenance management systems (CMMS), predictive maintenance enables repair-work orders to be released automatically, repair-parts inventories checked, or routine maintenance scheduled.

Prepaid: A freight term, which indicates that charges are to be paid by the shipper. Prepaid shipping charges may be added to the customer invoice, or the cost may be bundled into the pricing for the product.

Present Value: The value on a given date of a future payment or series of future payments, discounted to reflect the time value of money and other factors such as investment risk. Present value calculations are widely used in business and economics to provide a means to compare cash flows at different times on a meaningful "like to like" basis.

Preventative Maintenance (PM): Regularly scheduled maintenance activities performed in order to reduce or eliminate unscheduled equipment failures and downtime.

LETTER P

Primary-Business Test: A test used by the ICC to determine if a trucking operation is bona fide private transportation; the private trucking operation must be incidental to and in the furtherance of the primary business of the firm.

Primary Highways: Highways that connect lesser populated cities with major cities.

Primary Manufacturing Strategy: Your company's dominant manufacturing strategy. The Primary Manufacturing Strategy generally accounts for 80-plus % of a company's product volume. According to a study by Pittiglio Rabin Todd & McGrath (PRTM), approximately 73% of all companies use a make-to-stock strategy.

PRIME QR: Product Replenishment and Inventory Management Edge for Quick Response.

Private Carrier: A carrier that provides transportation service to the firm and that owns or leases the vehicles and does not charge a fee. Private motor carriers may haul at a fee for wholly-owned subsidiaries.

Private Label: Products that are designed, produced, controlled by, and which carry the name of the store or a name owned by the store; also known as a store brand or dealer brand. An example would be Wal-Mart's "Sam's Choice" products.

Private Warehouse: A warehouse that is owned by the company using it.

Pro Number: Any progressive or serialized number applied for identification of freight bills, bills of lading, etc.

LETTER P

Pro-Forma: A type of quotation or offer that may be used when first negotiating the sales of goods or services. If the pro-forma is accepted, then the terms and conditions of the pro-forma may become the request.

Pro-Forma Invoice: An invoice, forwarded by the seller of goods prior to shipment that advises the buyer of the particulars and value of the goods. Usually required by the buyer in order to obtain an import permit or letter of credit.

Proactive: The strategy of understanding issues before they become apparent and presenting the solution as a benefit to the customer, etc.

Process: A series of time-based activities that are linked to complete a specific output.

Process Benchmarking: The activity associated with comparing a process in use to one used by another organization (internal or external) Benchmarks may include quantitative metrics as well as functional steps (qualitative).

Process Improvement: Designs or activities, which improve quality or reduce costs, often through the elimination of waste or non-value-added tasks.

Process Manufacturing: The segment of the manufacturing industry which is associated with production of products using formulas and manufacturing recipes, and can be contrasted with discrete manufacturing, which is concerned with bills of material and routing.

Process Optimization: The study of process adjustment in order to optimize some specified set of parameters without violating some constraint. Some of the most common goals of process optimization are minimizing cost, and maximizing throughput and/or efficiency.

LETTER P

Process Yield: The resulting output from a process. An example would be a quantity of finished product output from manufacturing processes.

Procurement: The activities associated with acquiring products or services. The range of activities can vary widely between organizations to include all of parts of the functions of procurement planning, purchasing, inventory control, traffic, receiving, incoming inspection, and salvage operations.

Procurement Services Provider (PSP): A services firm that integrates procurement technologies with product, sourcing, and supply management expertise, to provide outsourced procurement solutions. A PSP serves as an extension of an organization's existing procurement infrastructure, managing the processes and spending categories and procurement processes that the organization feels it has opportunities for improvement but lacks the internal expertise to manage effectively.

Product: Something that has been or is being produced.

Product Characteristics: All of the elements that define a product's character, such as size, shape, weight, etc.

Product Configuration: The arrangement of parts or components to satisfy a customer’s demand by creating a product.

Product Configurator: A software tool which provides the capability of creating a specific end item version for products which have a number of optional components. Use in the design-to-order, engineer-to-order, or make-to- order environments.

LETTER P

Product Data Management (PDM): A technology solution which provides for a single, centralized data repository that enables authorized users throughout a company to access and update current product information, while ensuring they follow specific procedures. These systems typically link and consolidate information from multiple enterprise areas which control various aspects of product data such as engineering, manufacturing, finance and sales.

Product Family: A set of products which are considered as a single group when creating forecasts for planning purposes.

Product ID: A method of identifying a product without using a full description. These can be different for each document type and must, therefore, be captured and related to the document in which they were used. They must then be related to each other in context.

Product Incubator: The controlled environmental conditions that allow for the research, development, and testing of a new or redefined product.

Product Life Cycle: The life of a product in a market with respect to business sales and profits over time. There are five stages to the product life cycle: product development, introduction, growth, maturity and decline.

Product Life Cycle Management (PLM): The process of managing the entire lifecycle of a product from its conception, design, development and manufacture, to management of its introduction, growth and decline.

Product Planning: The ongoing process of identifying and articulating market requirements that define a product's feature set.

LETTER P

Product Support Integrator (PSI): An entity performing as a formally bound agent (e.g. contract, MOA, MOU) charged with integrating all source of support, public and private, defined within the scope of the PBL agreements to achieve the documented outcome. Activities coordinated by support integrators can include, as appropriate, functions provided by organic organizations, private sector providers, or a partnership between organic and private sector providers.

Product Support Manager (PSM): An overarching term characterizing the Various service function title, (i.e. Assistant PM for Logistics, System Support Manager, etc.) who leads the development and implementation of the product support and PBL strategies and ensure achievement of desired support outcomes during sustainment. The PSM employs a PSI, or a number of PSIs as appropriate, to achieve those outcomes.

Product Support Provider (PSP): Anyone who provides products or services in the sustainment of and acquisition system.

Product Velocity: The number of units per time period a company can sell.

Production-Related Material: Production-related materials are those items classified as material purchases and included in Cost of Goods Sold as raw material purchases.

Production Capacity: Measure of how much production volume may be experienced over a set period of time.

Production Forecast: The forecasted level of production which will be required to meet anticipated demand above the current level of inventory availability.

LETTER P

Production Line: The area where production occurs, specifically the series of work centers or pieces of equipment used in the manufacture or assembly of products.

Production Planning and Scheduling: The systems that enable creation of detailed optimized plans and schedules taking into account the resource, material, and dependency constraints to meet the deadlines.

Production Validation: The documented act of demonstrating that a procedure, process, and activity during the production process will consistently lead to the expected results.

Productivity: A measure of efficiency of resource utilization; defined as the sum of the outputs divided by the sum of the inputs.

Profit Management: The strategy and decision of how to deliver activities that support the delivery of value to the customer, the cost of channel engagement and product/customer profitability, and the assets required to deliver value.

Profit Ratio: The percentage of profit to sales-that is, profit divided by sales.

Profit Before Interest and Tax (PBIT): The financial profit generated prior to the deduction of taxes and interest due on loans.

Profitable to Promise: This is effectively a promise to deliver a certain order on agreed terms, including price and delivery. Profitable-to-Promise (PTP) is the logical evolution of Available-to-Promise (ATP) and Capable-to-Promise (CTP). While the first two are necessary for profitability, they are not sufficient. For enterprises to survive in a competitive environment, profit optimization is a vital technology.

LETTER P

Promotion Planning: Supports sales promotions management and covers both forecasting and evaluation of results. Promotion Planning assesses the impact of promotions on sales volumes, turnover and margins, supporting planners in the selection of products and markets to promote.

Proof of Delivery (POD): Information supplied by the carrier containing the name of the person who signed for the shipment, the time and date of delivery, and other shipment delivery related information. POD is also sometimes used to refer to the process of printing materials just prior to shipment (Print on Demand).

Proportional rate: A rate lower than the regular rate for shipments that have prior or subsequent moves; used to overcome competitive disadvantages of combination rates.

Protocol: Communication standards that determine message content and format, enabling uniformity of transmissions.

Public Private Partnering (PPP): An agreement between a government entity and one or more private industry, or other, entities to perform work or utilize facilities and equipment. The Public-Private Partnerships initiative is directed toward improving the output and performance of DoD organic activities through increased participation by the private sector via industrial partnering.

Public Warehouse: A business that provides short or long-term storage to a variety of businesses usually on a month-to-month basis. A public warehouse will generally use their own equipment and staff however agreements may be made where the client either buys or subsidizes equipment. Public warehouse fees are usually a combination of storage fees (per pallet or actual square footage) and transaction fees (inbound and outbound). Public warehouses are most often used to supplement space requirements of a private warehouse.

LETTER P

Public Warehouse Receipt: The basic document issued by a public warehouse manager that is the receipt for the goods given to the warehouse manager. The receipt can be either negotiable or nonnegotiable.

Pull-Based Customer Replenishment Signals: A signal based on actual demand and consumption from customers that trigger the issue of a reorder of product or materials.

Pull or Pull-Through Distribution: Supply-chain action initiated by the customer. Traditionally, the supply chain was pushed; manufacturers produced goods and "pushed" them through the supply chain, and the customer had no control. In a pull environment, a customer's purchase sends replenishment information back through the supply chain from retailer to distributor to manufacturer, so goods are "pulled" through the supply chain.

Pull Ordering System: A system in which each warehouse controls its own shipping requirements by placing individual orders for inventory with the central distribution center. This is a replenishment system where inventory is "pulled" into the supply chain (or "demand chain" by POS systems, or ECR programs), and is associated with "build to order" systems.

Pup: A 28-foot trailer, used mostly in less than truckload business.

Purchase Order (PO): The purchaser's authorization used to formalize a purchase transaction with a supplier. The physical form or electronic transaction a buyer uses when placing order for merchandise.

Purchase Price Discount: A pricing structure in which the seller offers a lower price if the buyer purchases a larger quantity.

LETTER P

Purchasing: The functions associated with buying the goods and services required by the firm.

Pure raw material: A raw material that does not lose weight in processing.

Push Back Rack: Utilizing wheels in the rack structure, this rack system allows palletized goods and materials to be stored by being pushed up a gently graded ramp. Stored materials are allowed to flow down the ramp to the aisle. This rack configuration allows for deep storage in each rack level.

Push Distribution: The process of building product and pushing it into the distribution channel without receiving any information regarding requirements.

Push Ordering System: A situation in which a firm makes inventory deployment decisions at the central distribution center and ships to its individual warehouses accordingly.

Push Technology: Webcasting (push technology) is the prearranged updating of news, weather, or other selected information on a computer user's desktop interface through periodic and generally unobtrusive transmission over the World Wide Web (including the use of the Web protocol on Intranet). Webcasting uses so-called push technology in which the Web server ostensibly "pushes" information to the user rather than waiting until the user specifically requests it.

Put Away: The activities involved in moving materials from a receiving area or the end of a production process into inventory stock locations.

Put-to-light: A method that uses lights to direct the placement of materials. Most often used in batch picking to designate the tote to place picked item into.

LETTER Q

QS 9000: A quality certification program used in the automotive industry which is based on the ISO 9000 standards.

Qualifier: A data element, which identifies or defines a related element, set of elements or a segment. The qualifier contains a code from a list of approved codes.

Qualitative Forecasting Techniques: A forecasting method where intuition or judgment is typically required due to the lack of hard quantitative facts. An example is where a new product is being introduced.

Quality: The degree to which a set of defined characteristics of a product or service fulfills known requirements. The common element of the business definitions is that the quality of a product or service refers to the perception of the degree to which the product or service meets the customer's expectations. Quality has no specific meaning unless related to a specific function and/or object. Quality is a perceptual, conditional and somewhat subjective attribute.

Quality Circle: A group composed of individuals trained to identify, analyze and solve work-related problems. They present their solutions to management in order to improve the performance of the organization, and motivate and enrich the work of employees. When matured, true quality circles become self-managing, having gained the confidence of management. Typical topics are improving occupational safety and health, improving product design, and improvement in the workplace and manufacturing processes.

Quality Control (QC): The management function that attempts to ensure that the foods or services manufactured or purchased meet the product or service specifications.

LETTER Q

Quality Function Deployment (QFD): A structured method for translating user requirements into detailed design specifications using a continual stream of 'what-how' matrices. QFD links the needs of the customer (end user) with design, development, engineering, manufacturing, and service functions. It helps organizations seek out both spoken and unspoken needs, translate these into actions and designs, and focus various business functions toward achieving this common goal.

Quality Policy: A statement of the overall quality intentions and direction of an organization as formally expressed by top management. A quality policy is a compliance requirement for ISO 9001.

Quantitative Forecasting Techniques: A forecasting method that relies on expert human judgment combined with a rating scale, instead of being purely based on hard (measurable and verifiable) data.

Quarantine: The act of setting aside materials which do not appear to meet known quality standards. Typically items in quarantine are placed into a secured area to prevent their use while an investigation is conducted and disposition is determined.

Quick Response (QR): A strategy widely adopted by general merchandise and soft lines retailers and manufacturers to reduce retail out-of-stocks, forced markdowns and operating expenses. These goals are accomplished through shipping accuracy and reduced response time. QR is a partnership strategy in which suppliers and retailers work together to respond more rapidly to the consumer by sharing point-of-sale scan data, enabling both to forecast replenishment needs. QR may also refer to bar codes used generally to convey information and web links about a product or service in promotional literature.

LETTER R

Rack: A piece of equipment which is used to store materials off of the floor. Racks will typically have shelves, but may be designed to hold materials vertically such as lengths of pipe of metal bar stock.

Racking: The activity of placing materials onto a rack. May also refer to hardware which is used to build racks.

Radio Frequency (RF): A form of wireless communications that lets users relay information via electromagnetic energy waves from a terminal to a base station, which is linked in turn to a host computer. The terminals can be place at a fixed station, mounted on a forklift truck, or carried in the worker's hand. The base station contains a transmitter and receiver for communication with the terminals. RF systems use either narrow-band or spread- spectrum transmissions. Narrow-band data transmissions move along a single limited radio frequency, while spread-spectrum transmissions move across several different frequencies. When combined with a bar-code system for identifying inventory items, a radio-frequency system can relay data instantly, thus updating inventory records in so- called "real time."

Radio Frequency Identification (RFID): The use of radio frequency technology including RFID tags and tag readers to identify objects. Objects may include virtually anything physical, such as equipment, pallets of stock, or even individual units of product. RFID tags can be active or passive. Active tags contain a power source and emit a signal constantly. Passive tags receive power from the radio waves sent by the scanner / reader. The inherent advantages of RFID over bar code technology are: 1) the ability to be read over longer distances, 2) the elimination of requirement for “line of sight” readability, 3) added capacity to contain information, and 4) RFID tag data can be updated / changed.

Ramp Rate: A statement which quantifies how quickly you grow or expand an operation Growth trajectory. Can refer to sales, profits or margins.

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Rate-Based Scheduling: A method used to create a production schedule which is based on the work center capacity or usage rate for a specified period (shift, date, week or other timeframe) and not by individual order or item.

Rate Basis Number: The distance between two rate basis points.

Rate Basis Point: The major shipping point in a local area; all points in the local area are considered to be the rate basis point.

Rate Bureau: A group of carriers that get together to establish joint rates, to divide joint revenues and claim liabilities, and the publish tariffs. Rate bureaus have published single line rates, which were prohibited in 1984.

Rationalization Exercise: Any activity which is intended to reduce the population of a specific element. This may be applied to SKU count, supplier lists, commodity designations, etc.

Rationing: A technique of allocating available stocks of product among requesting customers typically used when demand exceeds anticipated availability. Various formulas or strategies may be employed based on customer relationships, urgency and price.

Raw Materials (RM): Crude or processed material that can be converted by manufacturing, processing, or combination into a new and useful product.

Reach Truck: The class of lift trucks which have the ability to extend their forks to place or remove a pallet onto/from a rack.

LETTER R

Real-Time: The processing of data in a business application as it happens - as contrasted with storing data for input at a later time (batch processing).

Reasonable rate: A rate that is high enough to cover the carrier's cost but not too high to enable the carrier to realize monopolistic profits.

Recapture Clause: A provision of the 1920 Transportation Act that provided for self-help financing for railroads. Railroads that earned more than the prescribed return contributed one-half of the excess to the fund from which the ICC made loans to less profitable railroads. The Recapture Clause was repealed in 1933.

Receiving: The function of taking physical receipt of material and performing initial inspection of the incoming shipment for damage and validation with respect to purchase order quantity. Typically includes some initial data recording, but not quality assurance or stocking.

Receiving Dock: Distribution center location where the actual physical receipt of the purchased material from the carrier occurs.

Recently, Frequency, Monetary (RFM): It is a method for segmenting or rating your customers. The best customers are those who have bought from you recently, buy many times, and in large amounts.

Reconsignment: A carrier service that permits changing the destination and/or consignee after the shipment has reached its originally billed destination and paying the through rate from origin to final destination.

LETTER R

Redistribution: A trend in the foodservice distribution business where a large "redistributor" such as SYSCO or Dot Foods will purchase in truckload quantities from the food manufacturers and warehouse the products. Individual smaller distributors can then purchase multiple manufacturers' products from the redistributor and fill up an entire truck to save on shipping costs.

Reed-Bulwinkle Act: Legalized joint rate making by common carriers through rate bureaus; extended antitrust immunity to carriers participating in a rate bureau.

Reefer: A term used for refrigerated vehicles.

Reengineering: 1) A fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in performance. 2) A term used to describe the process of making (usually) significant and major revisions or modifications to business processes. 3) Also called Business Process Reengineering.

Refrigerated Carriers: Truckload carriers designed to keep perishables good refrigerated. The food industry typically uses this type of carrier.

Regeneration MRP: A technique in MRP systems where the master production schedule is completely re-planned through all bills of material. New and existing requirements are fully recalculated.

Regional Carrier: A for-hire air carrier, usually certificated, that has annual operating revenues of less than $74 million; the carrier usually operates within a particular region of the country.

Registration, Evaluation, Authorization, and Restriction of Chemical Substances (REACH): An EU regulation that addresses the production and use of chemical substances and any potential to harm the environment and human health.

LETTER R

Regular-route Carrier: A motor carrier that is authorized to provide service over designated routes.

Relay Terminal: A motor carrier terminal designed to facilitate the substitution of one driver for another who has driven the maximum hours permitted.

Release-to-Start Manufacturing: Average time from order release to manufacturing to the start of the production process. This cycle time may typically be required to support activities such as material movement and line changeovers.

Released-Value Rates: Rates based upon the value of the shipment; the maximum carrier liability for damage is less than the full value, and in return the carrier offers a lower rate.

Reliability: The ability of a system to perform as designated in an operational environment over time without failures. A common performance metric for reliability is Mean Time Between Failures. A carrier selection criterion that considers the variation in carrier transit time; the consistency of the transit time provided.

Remanufacturing / Refurbishing: Refers to the re-work performed on returned items to make the items saleable. Note that products made available for sale in this manner must be appropriately labeled as such.

Reorder point: A predetermined inventory level that triggers the need to place an order. This minimum level provides inventory to meet anticipated demand during the time it takes to receive the order.

Reparation: The ICC could require railroads to repay users the difference between the rate charged and the maximum rate permitted when the ICC found the rate to be unreasonable or too high.

LETTER R

Re-plan Cycle: Time between the initial creation of a regenerated forecast and the time its impact is incorporated into the Master Production Schedule of the end-product manufacturing facility. (An element of Total Supply Chain Response Time)

Replenishment: The process of moving or re-supplying inventory from a reserve (or upstream) storage location to a primary (or downstream) storage/picking location, or to another mode of storage in which picking is performed.

Request for Information (RFI): A document used to solicit information about vendors, products, and services prior to a formal RFQ/RFP process.

Request for Proposal (RFP): A document, which provides information concerning needs and requirements for a manufacturer. This document is created in order to solicit proposals from potential suppliers. For, example, a computer manufacturer may use a RFP to solicit proposals from suppliers of third party logistics services.

Request for Quote (RFQ): A formal document requesting vendor responses with pricing and availability of products. RQFs are typically solicited from a broad group of suppliers from which a narrower group will be selected and asked to provide a more detailed Request for Proposal.

Research, Development, Test and Evaluation (RDT&E): A service-unique account to fund PBL programs.

Resellers: A company or individual that purchases goods or services with the intention of reselling them rather than consuming or using them. This includes distributors and retailers generally.

LETTER R

Reserve Storage: An area where large quantities of product are stored, typically on pallets, which may be used to re-supply a forward picking area or pick module. Pallets could also be shipped complete to customers from reserves as the need arises.

Resource Driver: In cost accounting, the best single quantitative measure of the frequency and intensity of demands placed on a resource by other resources, activities, or cost objects. It is used to assign resource costs to activities, and cost objects, or to other resources.

Resources: Economic elements applied or used in the performance of activities or to directly support cost objects. They include people, materials, supplies, equipment, technologies and facilities.

Responsibility Matrix: In project management, this is a tool used to keep track of participation by key roles, stating who is in charge of completing assigned tasks. It can be useful in clarifying roles and responsibilities in cross- functional projects.

Retailer: An individual or organization which purchasers products from a manufacturer or distributor and resells them to the ultimate consumer. This group includes a wide range of businesses from door to door and corner stores to global companies like Walmart, as well as on-line stores like Amazon.

Return Disposal Costs: The costs associated with disposing or recycling products that have been returned due to customer rejects, end-of-life or obsolescence.

Return Goods Handling: Processes involved with returning goods from the customer to the manufacturer. Products may be returned because of performance problems or simply because the customer doesn't like the product.

LETTER R

Return Material Authorization or Return Merchandise Authorization (RMA): A reference number produced to recognize and give authority for a faulty product to be returned to a distribution center or manufacturer. This form typically needs to be accompanied by a Warranty/Return, which helps the company identify the original product and the reason for the return. The RMA number often acts as an order for the work required in repair situations, or as a reference for credit approval.

Return on Assets (ROA): Financial measure calculated by dividing profit by assets.

Return on Investment (ROI): The profit or loss resulting from an investment transaction, usually expressed as an annual percentage return. ROI is a popular metric for use in showing the value of an investment in new facilities, equipment or software vs. the cost of same.

Return on Net Assets: Financial measure calculated by dividing profit by assets net of depreciation.

Return on Sales: Financial measure calculated by dividing profit by sales. Provides information on how much profit is being produced per dollar of sales. Calculation: (Fiscal year's pretax income) / (total sales)

Return Product Authorization (RPA): A form generally required with a Warranty/Return, which helps the company identify the original product, and the reason for return. The RPA number often acts as an order form for the work required in repair situations, or as a reference for credit approval.

Return to Vendor (RTV): Material that has been rejected by the customer or the buyer's inspection department and is awaiting shipment back to the supplier for repair or replacement.

LETTER R

Returns Inventory Costs: The costs associated with managing inventory, returned for any of the following reasons: repair, refurbish, excess, obsolescence, End-of-Life, ecological conformance, and demonstration. Includes all applicable elements of the Level 2 component Inventory Carrying Cost of Total Supply Chain Management Cost

Returns Material Acquisition, Finance, Planning and IT Costs: The costs associated with acquiring the defective products and materials for repair or refurbishing items, plus any Finance, Planning and Information Technology cost to support Return Activity.. Includes all applicable elements of the Level 2 components Material Acquisition Cost (acquiring materials for repairs), Supply Chain Related Finance and Planning Costs and Supply Chain IT Costs of Total Supply Chain Management Cost.

Returns Order Management Costs: The costs associated with managing Return Product Authorizations (RPA). Includes all applicable elements of the Level 2 component Order Management Cost of Total Supply Chain Management Cost.
See also: *Order Management Costs*

Returns Processing Cost: The total cost to process repairs, refurbished, excess, obsolete, and End-of-Life products including diagnosing problems, and replacing products. Includes the costs of logistics support, materials, centralized functions, troubleshooting service requests, on-site diagnosis and repair, external repair, and miscellaneous. These costs are broken into Returns Order Management, Returns Inventory Carrying, Returns Material Acquisition, Finance, Planning, IT, Disposal and Warranty Costs.

Returns To Scale: A defining characteristic of B2B. Bigger is better. It's what creates the winner takes all quality of most B2B hubs. It also places a premium on being first to market and first to achieve critical mass.

LETTER R

Reverse Auction: A type of auction where a select group of suppliers bids competitively for an order posted by the buyer (opposite of a regular auction, where buyers are bidding to buy products). The buyer may choose the lowest bid or may split the purchase among several of the suppliers. As bidding continues, the prices decline.

Reverse Engineering: A process whereby competitors' products are disassembled & analyzed for evidence of the use of better processes, components & technologies.

Reverse Logistics: A specialized segment of logistics focusing on the movement and management of products and resources after the sale and after delivery to the customer. Includes product returns for repair and/or credit.

RF Remote Data Terminals (RDTs): An electronic device that is used to enter or retrieve data via radio frequency transmissions.

RFID: Radio Frequency Identification.

RGA: Return Goods Authorization.

Rich Media: An Internet advertising term for a Web page ad that uses advanced technology such as streaming video, downloaded applet (programs) that interact instantly with the user, and ads that change when the user's mouse passes over it.

Rich Text Format (RFT): A method of encoding text formatting and document structure using the ASCII character set. By convention, RTF files have an .rtf filename extension.

LETTER R

Right of Eminent Domain: A concept that permits the purchase of land needed for transportation right-of-way in a court of law; used by railroads and pipelines.

Risk Management: The identification, evaluation, and ranking the priority of risks followed by synchronized and cost-effective application of resources to lessen, monitor, and control the probability and/or impact of unfortunate events.

Risk Mitigation: A reduction in the exposure to risk, lessening the impact and/or the probability of its occurrence.

RMA: Return Material Authorization.

Roll-On, Roll-Off (RO-RO): A type of ship designed to permit cargo to be driven on at origin and off at destination; used extensively for the movement of automobiles.
See also: *Life-On, Lift-Off*

Root Cause Analysis: A class of problem solving methods aimed at identifying the root causes of problems or events. The practice of RCA is predicated on the belief that problems are best solved by attempting to correct or eliminate root causes, as opposed to merely addressing the immediately obvious symptoms.

RosettaNet: Consortium of major Information Technology, Electronic Components, Semiconductor Manufacturing, Telecommunications and Logistics companies working to create and implement industry-wide, open e-business process standards. These standards form a common e-business language, aligning processes between supply chain partners on a global basis. RosettaNet is a subsidiary of the GS1 group.

LETTER R

Routing Accuracy: When specified activities conform to administrative specifications and specified resource consumptions (both personnel and machinery) are detailed according to administrative specifications and is within 10% of actual requirements.

Routing or Routing Guide: 1) Process of determining how shipment will move between origin and destination. Routing information includes designation of carrier(s) involved, actual route of carrier, and estimated time enroute.
2) Right of shipper to determine carriers, routes and points for transfer shipments. 3) In manufacturing this is the document which defines a process of steps used to manufacture and/or assemble a product.

Rule of Eight: Before the Motor Carrier Act of 1980, contract carriers requesting authority were restricted to eight shippers under contract. The number of shippers has been deleted as a consideration for granting a contract carrier permit.

Rule of rate making: A regulatory provision directing the regulatory agencies to consider the earnings necessary for a carrier to provide adequate transportation.

Rules-Based Picking Logic: A picking methodology which is based on preset rules governing the various pick strategies dependent on factors stated in the orders being picked.

Rules-Based Returns: A returns management methodology which is based on preset rules governing the "if" and "how" returns are handled, based on the nature of the return request and the age or condition of the product.

LETTER S

SAE: Society of Automotive Engineers.

Safety Stock: The inventory a company holds above normal needs as a buffer against delays in receipt of supply or changes in customer demand.

Salable Goods: Products which are available for sale to customers as differentiated from items which are parts or assemblies that are not generally sold independently. In the retail environment salable is differentiated from ‘unsalable’ which denotes goods which are damaged, spoiled or past pull date.

Sales and Operations Planning (S&OP): A strategic planning process that reconciles conflicting business objectives and plans future supply chain actions. S&OP Planning usually involves various business functions such as sales, operations and finance to agree on a single plan/forecast that can be used to drive the entire business. Some organizations include suppliers and customers in their S&OP processes. S&OP can be a very effective tool in eliminating functional silos, and improving overall operations.

Sales Cycle Time: Measures the time required for a product to sell out completely from the store/shelf i.e., beginning from the day it enters the floor.

Sales Forecast: A prediction of future sales based on past performance of a given time period (Five month rolling average) and analysis of current market conditions.

Sales Mix: The relative volumes of sales for a variety of products as a percentage of the total sales volume.

Sales Plan: This is composed of two primary sections - sales strategy (objectives, market position, competition, conversion methods, etc.) and Tactics (implementation of the strategy, infrastructure, and projections). The sales plan projections are expressed in units and in sales dollars, they are a necessary for production planning or sales and operations planning process.

LETTER S

Sales Planning: The process of determining the level of sales necessary to meet general business objectives of profitability, productivity, competitive customer lead times, and so on, as expressed in the overall business plan.

Salvage Material: Unused materials in the form of waste or obsolete material that has a market value and can be sold.

Sarbanes-Oxley Public Accounting and Investor Protection Act (SOX): A United States federal law enacted on July 30, 2002 to protect investors by improving the accuracy and reliability of corporate disclosures made pursuant to the securities laws, and for other purposes. The law is divided into 11 sections ranging from additional corporate board responsibilities to criminal penalties.

Saw-Tooth Diagram: An X/Y diagram showing quantity on one axis and time depicting the inventory level for a typical item in stock with inventory level declining as it is consumed and rising as incoming orders are received.

Scalability: 1) How quickly and efficiently a company can ramp up to meet demand. See also uptime production flexibility. 2) How well a solution to some problem will work when the size of the problem increases. The economies to scale don't really kick in until you reach the critical mass, then revenues start to increase exponentially.

Scan: A computer term referring to the action of scanning bar codes or RF tags.

Scan-Based Trading (SBT): A practice that uses point-of-sale scanner data to manage payment, promotion and replenishment of products in a retail store. It is similar in nature to and an enhanced version of Vendor Managed / Owned Inventory where the retailers POS data is used as the basis for transactions between the supplier and the retailer. Supplements the consumption / replenishment component of CPFR and ECR strategies.

LETTER S

Scanlon Plan: A form of gainsharing that returns cost savings to the employees, usually as a lump-sum bonus. It is a productivity measure, as opposed to profit-sharing which is a profitability measure This program dates back to the 1930s and relies on committees to create cost-sharing ideas labor costs, productivity has increased while unit cost has decreased.

Scenario Forecasts: A methodology used to anticipate possible large scale changes that could affect, either positively or negatively, an organization. The organization would develop scenarios for how the organization will respond to different future situations the organization may encounter in the future.

Scenario Planning: A form of planning in which likely sets of relevant circumstances are identified in advance, and used to assess the impact of alternative actions.

Scorecard: A performance measurement tool used to capture a summary of the key performance indicators (KPIs)/metrics of a company. Metrics dashboards/scorecards should be easy to read and usually have "red, yellow, green" indicators to flag when the company is not meeting its targets for its metrics. Ideally, a dashboard/scorecard should be cross-functional in nature and include both financial and non-financial measures. In addition, scorecards should be reviewed regularly - at least on a monthly basis and weekly in key functions such as manufacturing and distribution where activities are critical to the success of a company. The dashboard/scorecards philosophy can also be applied to external supply chain partners such as suppliers to ensure that suppliers' objectives and practices align.

Scrap material: Unusable material that has no market value and must generally be disposed of as a cost.

LETTER S

Seasonality: A factor used in forecasting to reflect the seasonal variability in demand for certain products. Seasonality explains the fluctuation in demand for various recreational products which are used during different seasons.

Secondary highways: Highways that serve primarily rural areas.

Secure Electronic Transaction (SET): An early standard protocol for securing credit card transactions over insecure networks, specifically, the Internet.

Segmentation: In marketing, it is the identification and classification of groups of buyers within a market who share similar needs and who demonstrate similar buyer behavior.

Seiketsu: A Japanese term for *Standardize.* Refers to standardized work practices. It is more than standardized cleanliness. This means operating in a consistent and standardized fashion. Everyone knows exactly what his or her responsibilities are.

Seiri: A Japanese term for *sort* - a Lean 5 S term which refers to the practice of sorting through all the tools, materials, etc., in the work area and keeping only essential items. Everything else is stored or discarded. This leads to increased safety and less clutter to interfere with productive work.

Seiso: A Japanese term for *Shine* . Indicates the need to keep the workplace clean as well as neat by making cleaning a daily activity. At the end of each shift, the work area is cleaned up and everything is restored to its place. The key point is that maintaining cleanliness should be part of the daily work - not on occasional activity initiated when things get too messy.

LETTER S

Seiton: A Japanese term for *straighten* . The need for an orderly workplace. "Orderly" in this sense means arranging the tools and equipment in an order that promotes work flow. Tools and equipment should be kept where they will be used, and the process should be ordered in a manner that eliminates extra motion.

Self-Billing: A transportation industry strategy which prescribes that a carrier will accept payment based on the tender document provided by the shipper.

Self Correcting: A computer term for an online process that validates data and won't allow the data to enter the system unless all errors are corrected.

Sell In: Units which are sold to retail stores by the manufacturer or distributor for re-sale to consumers. The period of time in a Product Life Cycle where the manufacture works with it's resellers to market and build inventory for sale.

Sell Through: Units sold from retail stores to customers. The point in a Product Life Cycle where initial consumption rates are developed and demand established.

Selling, General and Administrative (SG&A) Expenses: Includes marketing, communication, customer service, sales salaries and commissions, occupancy expenses, unallocated overhead, etc. Excludes interest on debt, domestic or foreign income taxes, depreciation and amortization, extraordinary items, equity gains or losses, gain or loss from discontinued operations and extraordinary items.

Sensitivity Analysis (SA): The study of how the variation (uncertainty) in the output of a mathematical model can be apportioned, qualitatively or quantitatively, to different sources of variation in the input of a model.

Separable Cost: A cost that can be directly assignable to a particular segment of the business.

LETTER S

Serial Number: A serial number is a unique number assigned for identification which varies from its successor or predecessor by a fixed discrete integer value. Common usage has expanded the term to refer to any unique alphanumeric identifier for one of a large set of objects, however in data processing and allied fields in computer science. Not every numerical identifier is a serial number; identifying numbers which are not serial numbers are sometimes called nominal numbers.

Serial Shipping Container Code: An 18-character ID number used to identify containers including pallets and boxes primarily for containers which are a part of a shipment covered by an Automated Shipment Notice (ASN).

Serpentine Picking: A method used for picking warehouse orders wherein the pickers are directed to pick from racks on both sides of an aisle as they move from one end to the other. A different method would be to pick from one side (front to back) then from the opposite side (back to front). Where used, serpentine picking can halve travel time and improve traffic flow down the aisles. In both cases the plan is for the picker to begin the next aisle in sequence beginning at the end he finished the last to eliminate a dead run to start the next aisle.

Service Level: A metric, shown as a percentage, which captures the ability to satisfy demand or responsiveness. Order fill rates and machine or process up-time are examples of service level measures.

Service Level Agreement (SLA): May be used in lieu of a contract to represent and document the terms of the performance based agreement for organic support.

LETTER S

Service Oriented Architecture (SOA): A computer system term which describes an software architectural concept that defines the use of services to support business requirements. In an SOA, resources are made available to other participants in the network as independent services that are accessed in a standardized way. Most definitions of SOA identify the use of web services (using SOAP and WSDL) in its implementation, however it is possible to implement SOA using any service-based technology.

Service Parts Revenue: The sum of the value of sales made to external customers and the transfer price valuation of sales within the company of repair or replacement parts and supplies, net of all discounts, coupons, allowances, and rebates.

Setup costs: The costs incurred in staging the production line to produce a different item

Seven Wastes: Developed by Taiichi Ohno, Toyota's Chief Engineer for many years who was the innovator at the heart of the Toyota quality system, this refers to identified seven barriers to improving quality. They are the:

1. waste of overproduction
2. waste of waiting
3. waste of transportation
4. the waste of inappropriate processing
5. the waste of unnecessary Inventory
6. waste of unnecessary motions
7. waste of the defects.

LETTER S

Shared Services: Consolidation of a company's back-office processes to form a spinout (or a separate "shared services" unit, to be run like a separate business), providing services to the parent company and, sometimes, to external customers. Shared services typically lower overall cost due to the consolidation, and may improve support as a result of focus.

Shareholder Value: Combination of profitability (revenue and costs) and invested capital (working capital and fixed capital).

Shelf life: The recommended time that products can be stored, during before they are considered unsuitable for sale or consumption.

Ship Agent: A liner company or tramp ship operator representative who facilitates ship arrival, clearance, loading and unloading, and fee payment while at a specific port.

Ship Broker: A firm that serves as a go-between for the tramp ship owner and the chartering consignor or consignee.

Shipper: The party that tenders goods for transportation.

Shipper-Carrier: Shipper-carriers (also called private carriers) are companies with goods to be shipped that own or manage their own vehicle fleets. Many large retailers, particularly groceries and "big box" stores, are shipper- carriers.

Shipper's Agent: A firm that acts primarily to match up small shipments, especially single-traffic piggyback loads to permit use of twin-trailer piggyback rates.

Shipper's Association: A nonprofit, cooperative consolidator and distributor of shipments owned or shipped by member firms; acts in much the same was as for-profit freight forwarders.

LETTER S

Shipping: 1) The act of conveying materials from one point to another. 2) The functional area which preparers the outgoing shipment for transport.

Shipping Lane: A predetermined, mapped route on the ocean that commercial vessels tend to follow between ports. This helps ships avoid hazardous areas. In general transportation, the logical route between the point of shipment and the point of delivery used to analyze the volume of shipment between two points.

Shipping Manifest: A document which is typically presented to the carrier outlining the individual shipping orders included in a shipment. The manifest will show the reference number of each shipping order in the load, the weight and count of boxes or containers, and the destination.

Shop Floor Production Control Systems: The systems that assign priority to each shop order, maintaining work- in-process quantity information, providing actual output data for capacity control purposes and providing quantity by location by shop order for work-in-process inventory and accounting purposes.

Short-haul: A short move that is usually under 1,000 miles.

Short-haul Discrimination: Charging more for a shorter haul than for a longer haul over the same route, in the same direction, and for the same commodity.

Short Sea Shipping: Refers to the use of coastal waters for transport of cargo between coastal port areas as an alternative to the use of the highway system between the same two areas. An example would be using roll-on, roll- off vessels and truck trailers to transport cargo from the northeast US to the southeast or gulf coast.

LETTER S

Short Shipment: Piece of freight missing from shipment as stipulated by documents on hand.

Shrinkage: Refers to the loss of inventory count due to pilferage, damage, spoilage, etc. Shrinkage can occur while material is in stock and while it is in transit.

Sigma: A Greek letter (∑) commonly used to designate the standard deviation of a population. Sigma is a statistical term that measures how much a process varies from perfection, based on the number of defects per million units produced. In a process audit measurement would be of the number of times the process failed for each million time the process was run. In either case the subject is generally referred to as and "opportunity".
One Sigma = 690,000 per million units Two Sigma = 308,000 per million units
Note: Three Sigma = 66,800 per million units Four Sigma = 6,210 per million units
Five Sigma = 230 per million units Six Sigma = 3.4 per million units

Silo: Relates to a management / organization style where each functional unit operates independently, and with little or no collaboration between them and other units regarding major business processes and issues.

Simulation: A mathematical technique for testing the performance of a system due to uncertain inputs and/or uncertain system configuration options. Simulation produces probability distributions for the behavior (outputs) of a system. A company may build a simulation model of its build plan process to evaluate the performance of the build plan under multiple product demand scenarios.

Single-Period Inventory Models: An inventory model, sometimes called the 'newsboy' model, which is used to define economical or profitable lot-size quantities when an item is ordered or produced only once (newspapers, perishables, etc.) it balances the cost of a potential shortage with the cost of excess stock.

LETTER S

Single Minute Exchange of Dies (SMED): A manufacturing procedure which provides for a rapid and efficient way of converting a manufacturing process from running the current product to running the next product.

Single Source Leasing: Leasing both the truck and driver from one source.

Single Sourcing: When an organization deliberately chooses to use one supplier to provide a product or service, even though there are other suppliers available.

Six-Sigma Quality: Six-Sigma is a term coined to stress the continuous reduction in process variation to achieve near-flawless quality. When a Six Sigma rate of improvement has been achieved, defects are limited to 3.4 per million opportunities.

Skill Based Pay System: An incentive based pay system that promotes and rewards workers based on the number, type and depth of skills acquired, mastered and applied.

Skills Matrix: A visible means of displaying people's skill levels in various tasks. Used in a team environment to identify the skills required by the team and which team members have those skills.

Sleeper Team: The use or two drivers to operate a truck equipped with a sleeper berth; while one driver sleeps in the berth to accumulate the mandatory off-duty time, the other driver operates the vehicle.

Slip Seat Operation: A term used to describe a motor carrier relay terminal operation where one driver is substituted for another who has accumulated the maximum driving time hours.

LETTER S

Slip Sheet: Similar to a pallet, the slip sheet, which is made of cardboard or plastic, is used to facilitate movement of unitized loads.

Slotting: Inventory slotting or profiling is the process of identifying the most efficient placement for each item in a distribution center. Since each warehouse is different, proper slotting depends on a facility's unique product, movement, and storage characteristics. An optimal profile allows workers to pick items more quickly and accurately while reducing the risk of injuries.

Slurry: Dry commodities that are made into a liquid form by the addition of water or other fluids to permit movement by pipeline.

Small Group Improvement Activity: A framework for problem solving which involves the formation of a team often a cross-section of hourly and salaried employees, customers, and suppliers -- to brainstorm solutions and develop an implementation plan.

Small Parcel Ground (SPG): Mode of transportation where the unit being transported meets all of the following descriptions: under 150 lbs, inside of 130 inches in length and girth combined, individually labeled, and can be individually handled and transported absent of a pallet. Typically broken down for rating purposes into separate categories for commercial and residential.

Smart and Secure Trade Lanes (SST): Private initiative of the Strategic Council on Security Technology, an assembly of executives from port operators, major logistics technology providers, transportation consultancies, and former generals and public officials. Aims to enhance the safety, security and efficiency of cargo containers and their contents moving through the global supply chain into U.S. ports.

LETTER S

Smart Label: A label that has an RFID tag integrated into it.

Smart Phone: A personal mobile telephone which has the capability to perform many of the functions of a traditional personal computer. Examples include the Apple iPhone and the variety of Android based phones.

SmartWay Certification: A voluntary certification program that partners the freight industry sector with the EPA, focused on recognition and incentives for fuel efficiency improvements and greenhouse gas emissions reductions. Eligibility for the truck certification is based on a comprehensive set of fuel-saving, low-emission equipment specifications for new Class 8 long-haul tractors.

Smoothing: In statistics, a data set is smoothed by creating an approximating function that attempts to capture important patterns in the data, while leaving out noise.

Social Networking: Refers to systems that allow members of a specific site to learn about other members' skills, talents, knowledge, or preferences. Commercial examples include Facebook and LinkedIn. Some companies use these systems internally to help identify experts.

Social Responsibility: The continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of that of the local community and society at large. It's responsible production, socially responsible labor relations, community involvement, environmental cognizance, and sustainability.

Society of Logistics Engineers (SOLE): A professional association engaged in the advancement of logistics technology and management.

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Software as a Service (SaaS): A term which describes the use of computer systems provided by a remote third party, similar to what has traditionally been called a "Service Bureau" or "Application Service Provider (ASP)". In this setting the service provider maintains all of the computer hardware and software at their location, while the user accesses the systems via an internet connection and is charged a rate based on access time. It is also sometimes also referred to as "On Demand" services.

Sole sourcing: When there is only one supplier for a product or service, and no alternate suppliers are available.

Sortation: Separating items (parcels, boxes, cartons, parts, etc.) according to their intended destination within a plant or for transit.

Spam: A computer industry term referring to the Act of sending identical and irrelevant postings to many different newsgroups or mailing lists. Usually this posting is something that has nothing to do with the particular topic of a newsgroup or of no real interest to the person on the mailing list.

Special-Commodities Carrier: A common carrier trucking company that has authority to haul a special commodity; there are 16 special commodities, such as household goods, petroleum products, and hazardous materials.

Special-Commodity Warehouses: A warehouse that is used to store products that require unique types of facilities, such as grain (elevator), liquid (tank), and tobacco (barn).

LETTER S

Special Economic Zone (SEZ): A geographical region that has economic laws that are more liberal than a country's typical economic laws. The category 'SEZ' covers a broad range of more specific zone types, including Free Trade Zones (FTZ), Export Processing Zones (EPZ), Free Zones (FZ), Industrial Estates (IE), Free Ports, Urban Enterprise Zones and others. Usually the goal of an SEZ structure is to increase foreign investment.

Specific, Measurable, Achievable, Realistic, Time-Based (SMART): A shorthand description of a way of setting goals and targets for individuals and teams.

Splash Page: A "first" or "front" page that you often see on some websites, usually containing a "click-through" logo or message, or a fancy Flash presentation, announcing that you have arrived. The main content and navigation on the site lie "behind" this page (a.k.a. the homepage or "welcome page").

Split Case Order Picking: A process used to fill orders for quantities less than a full case thereby requiring ordered items to be picked from a case or some similar container.

Split Delivery: The act of creating a purchase order for a large volume of product in order to get a reduced price (price break), and then designating a spread of delivery dates to eliminate the need to pay for and stock the full quantity initially.

Spot: To move a trailer or boxcar into place for loading or unloading.

Spot Demand: Unusual demand for a product with a corresponding short lead time. An example of this is during a disaster when certain materials are immediately needed in larger than normal quantities.

Spur Track: A railroad track that connects a company's plant or warehouse with the railroad's track; the cost of the spur track and its maintenance is borne by the user.

LETTER S

Stable Demand: Products for which demand does not fluctuate widely at specific points during the year.

Stack Car: An intermodal flat car designed to place one container on top of another for better utilization and economics. Also referred to as a well car because the cars are lowered in the center to allow clearance when moving under low-lying structures.

Staff Functions: The support activities of planning and analysis provided to assist line managers with daily operations. Logistics staff functions include location analysis, system design, cost analysis, and planning.

Staging: The practice of picking material for a production or sales order and moving to a separate area for purposes of consolidation or identifying shortages. Staging may also refer to the placement of equipment in preparation of being used.

Stakeholders: An individual or group who will be impacted in some way by a change. They have in interest (positive or negative) in how a project, initiative, or transformation will resolve itself.

Stand Up Fork Lift: A forklift where the operator stands rather than sits. Most commonly used in case picking operations where the operator must get on and off the lift frequently.

Standard Carrier Alpha Code (SCAC or SCAC Code): A unique 2 to 4-letter code assigned to transportation companies for identification purposes. SCAC codes are required for EDI, and are printed on bills of lading and other transportation documents.

Standard Components: Components (parts) of a product, for which there is an abundance of suppliers. Not difficult to produce. An example would be a power cord for a computer.

LETTER S

Standard Cost Accounting System: A cost accounting system where the unit cost used is the predetermined cost of manufacturing a single unit or a number of product units during a specific period in the immediate future. It is the planned cost of a product under current and / or anticipated operating conditions.

Standard Deviation/Variance: Measures of dispersion for a probability distribution. The variance is the average squared difference of a distribution from the distribution's mean (average) value. The standard deviation is defined mathematically as the square root of the variance, and is thereby expressed in the same units as the random variable that's described by the probability distribution. A distribution that varies widely about its mean value will have a larger standard deviation/variance than a distribution with less variation about its mean value.

Standard Industrial Classification (SIC): A United States government system for classifying industries by a four- digit code. Established in 1937, it is being supplanted by the six-digit North American Industry Classification System, which was released in 1997; however certain government departments and agencies, such as the U.S. Securities and Exchange Commission (SEC), still use the SIC codes.

Start Manufacture to Order Complete Manufacture: Average lead-time from the time manufacturing begins to the time end products are ready for shipment, including the following sub-elements: order configuration verification, production scheduling, time to release order to manufacturing or distribution, and build or configure time. (An element of Order Fulfillment Lead Time)

Statement of Objectives (SOO): An alternative Section C document that expresses both technical and management requirements in the form of performance objectives. In these cases, the offeros are expected to prepare the Statement of Work in response to the SOO.

LETTER S

Statement of Work (SOW): A document that captures and acknowledges mutual agreement on the work activities, deliverables and timeline that a vendor will execute against in performance of work for a customer. Detailed requirements and pricing are usually specified in a Statement Of Work, along with various other terms and conditions.

Statistical Process Control (SPC): A method for achieving quality control in processes. The technique hinges on the observation that any process is subject to seemingly random variations, which are said to have common causes, and non-random variations, which are said to have special causes. SPC relies on measuring variation in output and setting control limits based on observations of variations arising solely from common causes. A process that is "in control" is expected to generate output that is within the control limits.

Steamship conferences: Collective rate-making bodies for liner water carriers.

Stevedores: Labor management companies that provide equipment and hire workers to transfer containers and cargo between ships and docks.

Stickering: Placing customer-specific stickers on boxes of product. An example would be where Wal-Mart has a request for their own product codes to be applied to retail boxes prior to shipment.

Stochastic Models: A process model whose behavior is non-deterministic, in that a system's subsequent state is determined both by the process's predictable actions and by a random element.

LETTER S

Stock Keeping Unit (SKU): A category of unit with unique combination of form, fit, and function (i.e. unique components held in stock). To illustrate: If two items are indistinguishable to the customer, or if any distinguishing characteristics visible to the customer are not important to the customer, so that the customer believes the two items to be the same, these two items are part of the same SKU. As a further illustration consider a computer company that allows customers to configure a product from a standard catalogue components, choosing from three keyboards, three monitors, and three CPUs. Customers may also individually buy keyboards, monitors, and CPUs. If the stock were held at the configuration component level, the company would have nine SKUs. If the company stocks at the component level, as well as at the configured product level, the company would have 36 SKUs. (9 component SKUs + 3*3*3 configured product SKUs. If as part of a promotional campaign the company also specially packaged the products, the company would have a total of 72 SKUs.

Stock Out: A term referring to a situation where no stock was available to fill a customer or production order during a pick operation. Stock outs can be costly, including the profit lost for not having the item available for sale, lost goodwill, substitutions, or lost customer .

Stockchase: Moving shipments through regular channels at an accelerated rate; to take extraordinary action because of an increase in relative priority.

Stockless Inventory: A materials management technique where management of an organization's supplies is switched to an outside vendor.

Stockless Purchasing: A practice whereby the buyer negotiates a price for the purchases of annual requirements of MRO items and the seller holds inventory until the buyer places an order for individual items.

LETTER S

Stockout Cost: The opportunity cost associated with not having sufficient supply to meet demand.

Stop Sequence: A load building technique where the first stop is loaded last.

Straight Truck: A truck which has the driver's cab and the trailer combined onto a single frame. Straight trucks do not have a separate tractor and trailer. The driving compartment, engine and trailer are one unit.

Strategic Alliance: Business relationship in which two or more independent organizations cooperate and willingly modify their business objectives and practices to help achieve long-term goals and objectives.

Strategic Planning: Looking one to five years into the future and designing a logistical system (or systems) to meet the needs of the various businesses in which a company is involved.

Strategic Profit Model: Visualization of an organization's finances to provide the ability to understand and analyze financial performance and return on investment (ROI).

Strategic Sourcing: The process of determining long-term supply requirements, finding sources to fulfill those needs, selecting suppliers to provide the services, negotiating the purchase agreements and managing the suppliers' performance. Focuses on developing the most effective relationships with the right suppliers, to ensure that the right price is paid and that lifetime product costs are minimized. It also assesses whether services or processes would provide better value if they were outsourced to specialist organizations.

LETTER S

Strategic Variables: The variables that effect change in the environment and logistics strategy. The major strategic variables include economics, population, energy, and government.

Strategy: A specific action to achieve an objective.

Stretch Hood: A form of pallet packaging similar to stretch wrap. With the stretch hood method a machine feeds a length of plastic sleeve over the pallet while at the same time stretching it wide enough to fit. After the sleeve is placed it is cut and sealed at the top creating a water tight enclosure, the stretchers release the film allowing it to shrink and hold the pallet contents.

Stretch Wrap: Clear plastic film that is wrapped around a unit load or partial load of product to secure it. The wrap is elastic.

Stores: The function associated with the storage and issuing of items that are frequently used.

Sub-Optimization: Decisions or activities in a part made at the expense of the whole. An example of sub- optimization is where a manufacturing unit schedules production to benefit its cost structure without regard to customer requirements or the effect on other business units.

Sub-SKU: A SKU which is used to identify a derivative of a product such as color / size differences in a particular style of clothing. Similar to the use of Product Family and Family Member SKUs in ERP systems. Popular in the apparel industry, but not limited to that sector. Some forecasting / planning tools allow for attributes within each sub-SKU which allow for setting forecasts by attribute such as color, season, etc.

LETTER S

Sub-Tier Suppliers: A successive supplier who provides a product or service to a direct supplier who ultimately provides that product or service to the customer.

Subcontracting: Sending work outside the enterprise to a third party. This typically involves specialized operations related to production.

Substance of Very High Concern (SVHC): A chemical substance (or part of a group of chemical substances) for which it has been proposed that the use within the European Union be subject to authorization under the REACH Regulation. Indeed, listing of a substance as an SVHC by the European Chemicals Agency (ECHA) is the first step in the procedure for authorization and restriction of use of a chemical. The first list of SVHCs was published on 28 October 2008.

Substitutability: The ability of a buyer to substitute the products of different sellers.

Sunk Cost: In economics and business decision-making, sunk costs are costs that cannot be recovered once they have been incurred. Sunk costs are sometimes contrasted with variable costs, which are the costs that will change due to the proposed course of action, and prospective costs which are costs that will be incurred if an action is taken.

Surrogate [item] Driver: A substitute for the ideal driver, but is closely correlated to the ideal driver, where [item] is Resource, Activity, Cost Object. A surrogate driver is used to significantly reduce the cost of measurement while not significantly reducing accuracy. For example, the number of production runs is not descriptive of the material disbursing activity, but the number of production runs may be used as an activity driver if material disbursements correlate well with the number of production runs.

LETTER S

Supermarket Approach: An inventory management and picking technique used in lean enterprises. This concept was conceived by Taiichi Ohno of Toyota after a visit to the US in 1956 where he was impressed by how consumers could pick whatever they need from the shelf, and the store would simply replenish what was taken. This became the basis for the “pull system”.

Supplier: An individual or an organization who supplies goods or services to the company. This is also sometimes referred to as a ”vendor.” In some settings—where a company provides goods through a distribution network—network members may be referred to as suppliers, even though they are the immediate customers of the company.

Supplier-Owned Inventory (SOI): A variant of vendor-managed inventory and consignment inventory. In this case, the supplier not only manages the inventory, but also owns the stock close to or at the customer location until the point of consumption or usage by the customer.

Supplier Capacity Analysis: An assessment of a supplier’s available capacity and whether the available capacity will meet the investigating organization’s requirements.

Supplier Certification: A process for ensuring that a supplier meets certain requirements. Requirements may consist of elements such as cost, quality, delivery, and environmental standards.

Supplier Council: A council that develops and supports businesses by facilitating important connections between corporations and suppliers.

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Supplier Criticality Assessment: This is a key component of a strategic sourcing program. Supplier criticality is based on factors such as relationship to the customer's core mission, access to technology, switching cost, and uniqueness of product/service. To assess criticality, suppliers are grouped into four relationship categories: fundamental, preferred, technology, mission.

Supplier Cycle Time: A Key indicator of On-Time Product Deliveries, in terms of whether the lead times are being met and product is reaching the market at the right time. Time required for a supplier to complete a single cycle, beginning with receipt of an order and ending with the fulfillment of the order.

Supplier Management Program: A defined policy regarding how suppliers are governed with respect to overall material planning, planning procurement staff, supplier negotiation and qualification, etc.

Supplier On Time Delivery: A metric which measures the performance of a supplier/vendor on his delivery commitment and to what extent he is matching with the lead times expressed in % terms.

Supplier Scorecards: Assessment of suppliers based on performance benchmarks in several key areas. Some examples are manufacturing Critical path time (MCT), on time delivery, quality parts per million, cost of poor quality, inventory turns, and productivity gains. A supplier's rank can then be established and the data used to measure the relative performance of a supplier within the supply base, and track improvement in supplier's quality over time.

Supplier Service Level: A metric which Helps measure the overall performance of a supplier. It Measures the ability of the business suppliers to provide their goods at the agreed times, quantity, and quality.

LETTER S

Supplemental carrier: A for-hire air carrier subject to economic regulations; the carrier has no time schedule or designated route; service is provided under a charter or contract per plane per trip.

Supply Chain: 1) starting with unprocessed raw materials and ending with the final customer using the finished goods, the supply chain links many companies together. 2) the material and informational interchanges in the logistical process stretching from acquisition of raw materials to delivery of finished products to the end user. All vendors, service providers and customers are links in the supply chain.

Supply Chain Council: A non-profit organization dedicated to improving the supply chain efficiency of its members. The Supply-Chain Council's membership consists primarily practitioners representing a broad cross section of industries, including manufacturers, services, distributors, and retailers. It is the organization responsible for the SCOR standards.

Supply Chain Execution (SCE): The ability to move the product out the warehouse door. This is a critical capacity and one that only brick-and-mortar firms bring to the B2B table. Dot-coms have the technology, but that's only part of the equation. The need for SCE is what is driving the Dot-coms to offer equity partnerships to the wholesale distributors.

Supply Chain Event Management (SCEM): SCEM is an application that supports control processes for managing events within and between companies. It consists of integrated software functionality that supports five business processes: monitor, notify, simulate, control and measure supply chain activities.

Supply Chain Integration (SCI): Likely to become a key competitive advantage of selected e-marketplaces. Similar concept to the Back-End Integration, but with greater emphasis on the moving of goods and services.

LETTER S

Supply Chain Inventory Visibility: The ability to visualize the status of inventory in the supply chain from some point upstream—beginning with the various tiers of suppliers—on to downstream—through distribution and retail channels. In most cases, this will only be one level in each direction; however, it may include the ability to access supply and demand information at those points as well.

Supply Chain Network Design Systems: The systems employed in optimizing the relationships among the various elements of the supply chain manufacturing plants, distribution centers, points-of-sale, as well as raw materials, relationships among product families, and other factors-to synchronize supply chains at a strategic level.

Supply Chain Operations Reference Model (SCOR): This is the model developed by the Supply-Chain Council SCC and is built around six major processes: plan, source, make, deliver, return and enable. The aim of the SCOR is to provide a standardized method of measuring supply chain performance and to use a common set of metrics to benchmark against other organizations.

Supply Chain-Related Finance and Planning Cost Element: One of the elements comprising a company's total supply-chain management costs. These costs consist of the following:
Supply-Chain Finance Costs: Costs associated with paying invoices, auditing physical counts, performing inventory accounting, and collecting accounts receivable.

Does NOT include customer invoicing/ accounting costs (see Order Management Costs).

Demand/Supply Planning Costs: Costs associated with forecasting, developing finished goods, intermediate, subassembly or end item inventory plans, and coordinating Demand/Supply

LETTER S

Supply Chain-Related IT Costs: Information Technology (IT) costs associated with major supply-chain management processes as described below. These costs should include: Development costs (costs incurred in process reengineering, planning, software development, installation, implementation, and training associated with new and/or upgraded architecture, infrastructure, and systems to support the described supply-chain management processes), Execution costs (operating costs to support supply-chain process users, including computer and network operations, EDI and telecommunications services, and amortization/depreciation of hardware, Maintenance costs (costs incurred in problem resolution, troubleshooting, repair, and routine maintenance associated with installed hardware and software for described supply-chain management processes. Include costs associated with data base administration, systems configuration control, release planning and management. These costs are associated with the following processes:
PLAN
Product Data Management - Product phase-in/phase-out and release; post introduction support & expansion; testing and evaluation; end-of-life inventory management. Item master definition and control.
Forecasting and Demand/Supply Manage and Finished Goods - Forecasting; end-item inventory planning, DRP, production master scheduling for all products, all channels.
SOURCE
Sourcing/Material Acquisition - Material requisitions, purchasing, supplier quality engineering, inbound freight management, receiving, incoming inspection, component engineering, tooling acquisition, accounts payable.
Component and Supplier Mgt - Part number cross-references, supplier catalogs, approved vendor lists. Inventory Management - Perpetual and physical inventory controls and tools.

Cont...

LETTER S

MAKE
Manufacturing Planning - MRP, production scheduling, tracking, mfg. engineering, mfg. documentation management, inventory/obsolescence tracking.
Inventory Management - Perpetual and physical inventory controls and tools.
Manufacturing Execution - MES, detailed and finite interval scheduling, process controls and machine scheduling.
DELIVER
Order Management - Order entry/ maintenance, quotes, customer database, product/price database, accounts receivable, credits and collections, invoicing.
Distribution and Transportation Management - DRP shipping, freight management, traffic management. Inventory Management - Perpetual and physical inventory controls and tools.
Warehouse Management - Finished goods, receiving and stocking, pick/pack.
Channel Management - Promotions, pricing and discounting, customer satisfaction surveys.
Field Service/Support - Field service, customer and field support, technical service, service/call management, returns and warranty tracking.
EXTERNAL ELECTRONIC INTERFACES
Plan/Source/Make/Deliver - Interfaces, gateways, and data repositories created and maintained to exchange supply-chain related information with the outside world. E-Commerce initiatives. Includes development and implementation costs.
Accurate assignment of IT-related cost is challenging. It can be done using Activity-Based - Note: Costing methods, or using other approaches such as allocation based on user counts, transaction counts, or departmental headcounts. The emphasis should be on capturing all costs. Costs for
any IT activities that are outsourced should be included.

Supply Chain Resiliency: A term describing the level of hardening of the supply chain against disasters.

LETTER S

Supply Chain Strategy Planning: The process of process of analyzing, evaluating, defining supply chain strategies, including network design, manufacturing and transportation strategy and inventory policy.

Supply Chain Vulnerability: Of equal importance to Variability, Velocity and Volume in the elements of the Supply Chain. The term evaluates the supply chain based on the level of acceptance of the five steps of disaster logistics being planning, detection, mitigation, response and recovery.

Supply Planning: The process of identifying, prioritizing, and aggregating, as a whole with constituent parts, all sources of supply that are required and add value in the supply chain of a product or service at the appropriate level, horizon and interval.

Supply Planning Systems: The process of identifying, prioritizing, and aggregating, as a whole with constituent parts, all sources of supply that are required and add value in the supply chain of a product or service at the appropriate level, horizon and interval.

Supply Warehouse: A warehouse that stores raw materials. Goods from different suppliers are picked, sorted, staged, or sequenced at the warehouse to assemble plant orders.

Support Costs: Costs of activities not directly associated with producing or delivering products or services. Examples are the costs of information systems, process engineering and purchasing.

LETTER S

Supportability: The inherent quality of system – including design, technical support date, and maintenance procedures – to facilitate detection, isolation, and timely repair/replacement of system anomalies. This includes factors such as diagnostics, prognostics, real-time maintenance data collection, "design for support", and "support the design" aspects, corrosion protection and mitigation, reduced logistics footprint, and other factors that contribute to optimum environment for developing and sustaining a stable, operational system.

Surcharge: An add-on charge to the applicable charges; motor carriers have a fuel surcharge, and railroads can apply a surcharge to any joint rate that does not yield 110% of variable cost.

Surge Capacity: A measure of the ability to respond to a short term increase in demand or a demand spike.

Sustainability: Corporate sustainability refers to efforts a company makes related to conducting business in a socially and environmentally responsible manner. It includes elements including sustainable development, corporate social responsibility (CSR), stakeholder concerns, and corporate accountability.

Sustaining Activity: An activity that benefits an organizational unit as a whole, but not any specific cost object.

SWAS: Store-Within-A-Store.

Swimlane: A row on a business process diagram type called a "Swimlane Chart" which provides a way of indicating which department or individual is responsible for a given process or activity. The responsible area or party is named on the left side of the diagram with processes organized left to right and lines of linkage between each lane to show handoffs between areas.

LETTER S

Switch Engine: A railroad engine that is used to move rail cars short distances within a terminal and plant.

Switching company: A railroad that moves rail cars short distances; switching companies connect two mainline railroads to facilitate through movement of shipments.

SWOT: See *SWOT Analysis*

SWOT Analysis: A strategic planning method used to evaluate the **S**trengths, **W**eaknesses, **O**pportunities, and
Threats involved in a project or in a business venture.

Synchronization: The concept that all supply chain functions are integrated and interact in real time; when changes are made to one area, the effect is automatically reflected throughout the supply chain.

Synchronous Process: A series of activities which are linked to each other, one to the next, and in which each preceding activity must complete before the next is started.

Syntax: The grammar or rules which define the structure of the EDI standard.

System: A set of interacting elements, variables, parts, or objects that are functionally related to each other and form a coherent group.

Systems Concept: A decision-making strategy that emphasizes overall system efficiency rather than the efficiency of the individual part of the system.

LETTER T

Tactical Planning: The process of systematic determination and scheduling of immediate or short-term activities required to achieve the objectives of the organizations strategic plan.

Taguchi Method: A method of analyzing quality problems developed by Genichi Taguchi of Nippon Telephone and Telegraph. It involves removing variability and the effects of causes instead of the cause, and focuses on robust process and product design and the identification of after-sales costs. This method has been subject to some criticism.

Takt Time: It can be defined as the maximum time per unit to produce a product in order to meet demand. It is derived from the German word “Taktzeit” (cycle time). Takt time sets the pace for industrial manufacturing lines. For example, in automobile manufacturing, cars are assembled on a line and are moved on to the next station after a certain time—the takt time. Therefore, the time needed to complete work on each station has to be less than the takt time in order for the product to be completed within the allotted time.

Tally sheet: A printed form on which companies record, by making an appropriate mark, the number of items they receive or ship. In many operations, tally sheets become a part of the permanent inventory records.

Tandem: A truck that has two drive axles or a trailer that has two axles.

Tank cars: Rail cars that are designed to haul bulk liquids or gas commodities.

Tapering rate: A rate that increases with distance but not in direct proportion to the distance the commodity is shipped.

LETTER T

Tare Weight: The weight of an empty vehicle or container. By subtracting it from the gross weight (laden weight), the weight of the goods carried (the net weight) may be determined.

Target Costing: A target cost is calculated by subtracting a desired profit margin from an estimated or a market- based price to arrive at a desired production, engineering, or marketing cost. This may not be the initial production cost, but one expected to be achieved during the mature production stage. Target costing is a method used in the analysis of product design that involves estimating a target cost and then designing the product/service to meet that cost.

Tariff: A tax assessed by a government on goods entering or leaving a country. The term is also used in transportation in reference to the fees and rules applied by a carrier for its services.

Tasks: The breakdown of the work in an activity into smaller elements.

Task interleaving: A method of combining warehouse picking and putaway. Warehouse Management Systems (WMS) use logic to direct (typically with an RF terminal) a lift truck operator to put away a pallet en route to the next pick. The idea is to reduce “deadheading” or driving empty material handling equipment around the warehouse. Tasks for cycle counts, pick area replenishments and re-slotting of goods are also candidates for interleaving.

Taxonomy: The practice and science of classification. Taxonomy may represent a particular classification arranged in a hierarchical structure.

Technical Components: Component of a product for which there is a limited number of suppliers. These parts are hard to make, and require much more lead time & expertise on the part of the supplier to produce than standard components do.

LETTER T

Temporary authority: The ICC may grant a temporary operating authority as a common carrier for up to 270 days.

Ten Principles: A principle is a general rule, fundamental, or other statement of an observed truth. Over time certain fundamental truths of material handling have been found to exist. The "principles" of material handling are often useful in analyzing, planning and managing material handling activities and systems. At the very least they form a basic foundation upon which one can begin building expertise in material handling.

Tender: The document which describes a business transaction to be performed. An example would be a request to a carrier to pick up goods for shipment

Terminal Delivery Allowance: A reduced rate offered in return for the shipper of consignee tendering or picking up the freight at the carrier's terminal.

Terms and Conditions (T's & C's): All the provisions and agreements of a contract.

Theoretical Cycle Time: The back-to-back process time required for a single unit to complete all stages of a process without waiting, stoppage, or time lost due to error.

Theory of Constraints (TOC): A production management theory which dictates that volume is controlled by a series of constraints related to work center capacity, component availability, finance, etc. Total throughput cannot exceed the capacity of the smallest constraint, and any inventory buffers or excess capacity at non-related work centers is waste.

LETTER T

Third-Party Logistics (3PL): Outsourcing all or much of a company's logistics operations to a specialized company. The term "3PL" was first used in the early 1970s to identify intermodal marketing companies (IMCs) in transportation contracts. Up to that point, contracts for transportation had featured only two parties, the shipper and the carrier. When IMCs entered the picture—as intermediaries that accepted shipments from the shippers and tendered them to the rail carriers—they became the third party to the contract, the 3PL. Definition has broadened to the point where these days, every company that offers some kind of logistics service for hire calls itself a 3PL. Preferably, these services are integrated, or "bundled," together by the provider. Services they provide are transportation, warehousing, cross-docking, inventory management, packaging, and freight forwarding. In 2008 legislation passed declaring that the legal definition of a 3PL is "A person who solely receives, holds, or otherwise transports a consumer product in the ordinary course of business but who does not take title to the product."

Third-Party Logistics Provider: A firm which provides multiple logistics services for use by customers. Preferably, these services are integrated, or "bundled" together by the provider. These firms facilitate the movement of parts and materials from suppliers to manufacturers, and finished products from manufacturers to distributors and retailers. Among the services which they provide are transportation, warehousing, cross-docking, inventory management, packaging, and freight forwarding.

Third-Party Warehousing: The act of using a contractor to provide warehousing services, and the name of the industry which is involved in providing contract warehousing operations for hire.

Three-layer Framework: A basic structure and operational activity of a company; the three layers include operational systems, control and administrative management, and master planning.

LETTER T

Time-Definite Services: Delivery is guaranteed on a specific day or at a certain time of the day.

Time/service Rate: A rail rate that is based upon transit time.

Time-To-Market: The time interval between product concept development and introduction to the marketplace. It includes specification development, product development and release to production.

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Time/service Rate: A rail rate that is based upon transit time.

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Ton-mile: A measure of output for freight transportation; it reflects the weight of the shipment and the distance it is hauled; a multiplication of tons hauled and distance traveled.

Total Annual Material Receipts: The dollar amount associated with all direct materials received from January 1 to December 31.

Total Annual Sales: Total Annual Sales are Total Product Revenue plus post-delivery revenues (e.g., maintenance and repair of equipment, system integration) royalties, sales of other services, spare parts revenue, and rental/lease revenues.

LETTER T

Total Average Inventory: Average normal use stock, plus average lead stock, plus safety stock.

Total Cost Analysis: A decision-making approach that considers minimization of total costs and recognizes the interrelationship among system variables such as transportation, warehousing, inventory, and customer service.

Total Cost Curve: A curve that graphically represents the relation between the total cost incurred by a firm in the short-run production of a good or service and the quantity produced. The total cost curve is a cornerstone upon which the analysis of short-run production is built. It combines all opportunity cost of production into a single curve, which can then be used with the total revenue curve to determine profit.

Total Cost of Ownership (TCO): TCO includes all of the direct and indirect costs associated with an asset or acquisition over the entire life cycle of the product or service. It includes not just the purchase price, but also such things as transportation, handling and storage, damage and shrinkage, taxes and insurance, and redistribution costs. In some cases, one must also add installation, upgrade costs, training, support, service, maintenance, downtime, retirement costs and/or disposal.

Total Cost of Quality: A measure that sums all costs associated with poor quality or product failure, including rework, scrap, warranty costs and other costs incurred in preventing or resolving quality problems. Costs associated with maintenance and quality training are not included.

Total Cumulative Manufacture Cycle Time: The average time between commencement of upstream processing and completion of final packaging for shipment operations as well as release approval for shipment. Do not include WIP storage time.

LETTER T

Total Inventory Days of Supply: Total gross value of inventory at standard cost before reserves for excess and obsolescence. Includes only inventory that is on the books and currently owned by the business entity. Future liabilities such as consignments from suppliers are not included. Calculation: [5 Point Annual Average Gross Inventory] / [Cost of Goods Sold/365]

Total Landed Costs: Usually referred to as the total cost of a landed shipment, it includes purchase price, freight, insurance, and other costs up to the port of destination. In some instances, it may also include the customs duties and other taxes levied on the shipment.

Total Make Cycle Time: The average total processing time between commencement of upstream processing and completion of all manufacturing process steps up to, but NOT including, packaging and labeling operations (i.e. from start of manufacturing to final formulated product ready for primary packaging). Do not include hold or test and release times. Calculation: [Average # of units in active manufacturing] / [Average daily output in units]

Total Package and Label Cycle Time: The average total processing time between the commencement of the primary packaging and labeling steps to completion of the final packaging steps for shipment. Calculation: [Average # of units in packaging and labeling

Total Product Revenue: The total value of sales made to external customers plus the transfer price valuation of intra-company shipments, net of all discounts, coupons, allowances, and rebates. Includes only the intra-company revenue for product transferring out of an entity, installation services if these services are sold bundled with end products, and recognized leases to customers initiated during the same period as revenue shipments, with revenue credited at the average selling price.

LETTER T

Total Productive Maintenance (TPM): Team based maintenance process designed to maximize machine availability and performance and product quality.

Total Quality Management (TQM): A management approach in which managers constantly communicate with organizational stakeholders to emphasize the importance of continuous quality improvement.

Total Sourcing Lead Time (95% of Raw Material Dollar Value): Cumulative lead time (total average combined inside-plant planning, supplier lead time [external or internal], receiving, handling, etc., from demand identification at the factory until the materials are available in the production facility) required to source 95% of the dollar value (per unit) of raw materials from internal and external suppliers.

Total Supply-Chain Management Cost (5 elements): Total cost to manage order processing, acquire materials, manage inventory, and manage supply-chain finance, planning, and IT costs, as represented as a percent of revenue. Accurate assignment of IT-related cost is challenging. It can be done using Activity-Based-Costing methods, or based on more traditional approaches. Allocation based on user counts, transaction counts, or departmental headcounts are reasonable approaches. The emphasis should be on capturing all costs, whether incurred in the entity completing the survey or incurred in a supporting organization on behalf of the entity. Reasonable estimates founded in data were accepted as a means to assess overall performance. All estimates reflected fully burdened actuals inclusive of salary, benefits, space and facilities, and general and administrative allocations.
[Order Management Costs +
Material Acquisition Costs +
Calculation: Inventory Carrying Costs +
Supply-Chain-Related Finance and Planning Costs +
Total Supply-Chain-Related IT Costs] / [Total Product Revenue]

LETTER T

Total Supply Chain Response Time: The time it takes to rebalance the entire supply chain after determining a change in market demand. Also, a measure of a supply chain's ability to change rapidly in response to marketplace changes.
[Forecast Cycle Time] + [Re-plan Cycle Time] + Calculation: [Intra-Manufacturing Re-plan Cycle Time] + [Cumulative Source/Make Cycle Time] + [Order Fulfillment Lead Time]

Total Test and Release Cycle Time: The average total test and release time for all tests, documentation reviews, and batch approval processes performed from start of manufacturing to release of final packaged product for shipment.

Toto Authority: A private motor carrier receiving operating authority as a common carrier to haul freight for the public over the private carrier's backhaul; this type of authority was granted to the Toto Company in 1978.

Touch Labor: The labor that adds value to the product - assemblers, welders etc. This does not include indirect resources such as material handlers (mover and stage product, mechanical and electrical technicians responsible for maintaining equipment.

Touches: The number of times a labor action is taken during a manufacturing or assembly process. Touches are typically used to measure efficiency or for costing and pricing purposes.

Tracing: Determining where a shipment is during the course of a move.

Traceability: 1) The ability to track the location of a shipment as it moves through the shipping process to the customer. 2) The ability to determine the source and disposition of individual lot numbered or serial numbered products.

LETTER T

Tracing: 1) Determining where a shipment is during the course of a move. 2) The practice of relating resources, activities and cost objects using the drivers underlying their cost causal relationships. The purpose of tracing is to observe and understand how costs are arising in the normal course of business operations.

Tracking and Tracing: Monitoring and recording shipment movements from origin to destination.

Tracking Signal: A statistic that reveals when parameter estimates in a forecasting model are not optimal. For example, a tracking signal might be based on a graph of the ratio of the cumulative sum of the differences between the actual and forecast values to the mean absolute deviation. If the tracking signal exceeds a certain value, the series can then be flagged for examination. This concept has been used successfully in quality control. It seems sensible also for forecasting, although little research supports its use. An alternative is to use successive re- estimation.

Tractor: The tractor is the driver compartment and engine of the truck. It has two or three axles.

Trading Partner: Companies that do business with each other via EDI (e.g., send and receive business documents, such as purchase orders).

Trading Partner Agreement: The written contract that spells out agreed upon terms between EDI trading partners.

Traffic: A department responsible for the process of determining timely and economic delivery methods, arranging internal or external transportation, and tracking shipment status and logistics network issues.

LETTER T

Traffic Management: The management and controlling of transportation modes, carriers and services.

Trailer: The part of the truck that carries the goods.

Trailer Drops: When a driver drops off a full truck at a warehouse and picks up an empty one.

Trailer on a Flatcar (TOFC): Transport of truck trailers with their loads on specially designed rail cars.

Training Plan: An outline of the training process an instructor will use in a training program.

Tramp: An international water carrier that has no fixed route or published schedule; a tramp ship is chartered for a particular voyage or a given time period.

Transaction: A single completed transmission, e.g., transmission of an invoice over an EDI network. Analogous to usage of the term in data processing, in which a transaction can be an inquiry or a range of updates and trading transactions. The definition is important for EDI service operators, who must interpret invoices and other documents.

Transaction Set: Commonly used business transactions (e.g. purchase order, invoice, etc.) organized in a formal, structured manner, consisting of a Transaction Set header control segment, one or more Data Segments, and a Transaction Set trailer Control Data Segment.

LETTER T

Transaction Set ID: A three digit numerical representation that identifies a transaction set.

Transactional Acknowledgement: Specific Transaction Sets, such as the Purchase Order Acknowledgement (855), that both acknowledges receipt of an order and provides special status information such as reschedules, price changes, back order situation, etc.

Transfer Pricing: The pricing of goods or services transferred from one segment of a business to another. Transfer pricing generally includes the costs associated with performing the transfer and therefore item costs will be incrementally higher than when received through normal channels.

Transit privilege: A carrier service that permits the shipper to stop the shipment in transit to perform a function that changes the commodity's physical characteristics but to pay the through rate.

Transit Time: The total time that elapses between a shipment's pickup and delivery.

Translation Software: Software the converts or "translates" business application data into EDI standard formats, and vice versa.

Transload Facility: A Facility used for transferring shipments from truck to rail and vice versa. Operations where inbound ocean containers (or other cargo) are unloaded, palletized and then reloaded (typically into 53-foot over-the road trailers), for railway or road transport to a final destination.

Transmission Acknowledgment: Acknowledgment that a total transmission was received with no errors detected.

LETTER T

Transparency: The ability to gain access to information without regard to the systems landscape or architecture. An example would be where an online customer could access a vendor's web site to place an order and receive availability information supplied by a third party outsourced manufacturer or shipment information from a third party logistics provider.

Transportation Association of America: An association that represents the entire U.S. Transportation system, carriers, users, and the public; now defunct.

Transportation Cycle Time: A performance measure of the Logistics service provider / transporter. The lead time taken by the product to reach the final destination, The difference between the day it leaves the warehouse and the day it reaches its destination.

Transportation Management System (TMS): A computer system designed to provide optimized transportation management in various modes along with associated activities, including managing shipping units, labor planning and building, shipment scheduling through inbound, outbound, intra-company shipments, documentation management (especially when international shipping is involved), and third party logistics management.

Transportation Method: A linear programming technique that determines the least-cost allocation of shipping goods from plants to warehouses of from warehouses to customers.

Transportation Mode: The method of transportation: land, sea, or air shipment.

Transportation Planning: The process of defining an integrated supply chain transportation plan and maintaining the information which characterizes total supply chain transportation requirements, and the management of transporters both inter and Intra-Company.

LETTER T

Transportation Planning Systems: The systems used in optimizing of assignments from plants to distribution centers, and from distribution centers to stores. The systems combine "moves" to ensure the most economical means are employed.

Transportation Requirements Planning (TRP): Utilizing computer technology and information already available in MRP and DRP databases to plan transportation needs based on field demand.

Transportation Research Board: A division of the National Academy of Sciences which pertains to transportation research.

Transportation Research Forum: A professional association that provides a forum for the discussion of transportation ideas and research techniques.

Transportation Security Administration (TSA): TSA was created in response to the attacks of September 11th and signed into law in November 2001. TSA was originally in the Department of Transportation but was moved to the Department of Homeland Security in March 2003. TSA's mission is to protect the nation's transportation systems by ensuring the freedom of movement for people and commerce.

Transit Privilege: A carrier service that permits the shipper to stop the shipment in transit to perform a function that changes the commodity's physical characteristics, but to pay the through rate.

Transit Time: The total time that elapses from pickup to delivery of a shipment.

Transhipment problem: A variation of the transportation method of linear programming that considers consolidating shipments to one destination and reshipping from that destination.

LETTER T

Travel agent: A firm that provides passenger travel information; air, rail, and steamship ticketing; and hotel reservations. The travel agent is paid a commission by the carrier and hotel.

Trend: Refers to a factor used in forecasting where there is general upward or downward movement of a variable over time such as demand for a product.

Trend Forecasting Models: Methods for forecasting sales data when analysis of data exhibits an ongoing upward or downward pattern that is not due to seasonality or random noise.

Tribal Knowledge: A person's in-depth knowledge about a specific project or process because he or she has been working on the project or process since its inception. It can also be any unwritten information that is not commonly known by others in the department, functional area or company.

Triple Bottom Line Metrics: Metrics that measure ecological and social performance in addition to financial performance.

Truckload Carriers (TL): Trucking companies, which move full truckloads of freight directly from the point of origin to destination.

Truckload Lot: A quantity of freight which, although it does not fully fill a truck, qualifies as large enough to be rated for a truckload rate.

Turnover: 1) For Inventory - A calculation of the number of times the inventory of an item would be consumed during a period given average inventory levels and consumption. 2) For Personnel - A calculation of the rate that the employee base of a company or department would change during a period due to hiring and termination.

LETTER T/U

Twenty-foot Equivalent Unit (TEU): Standard unit for counting containers of various capacities and for describing the capacities of container ships or terminals. One 20 Foot ISO container equals 1 TEU. One 40 Foot ISO container equals two TEU. A 20 foot container is typically 8.5 feet tall and 8 feet wide outside and has an internal capacity of 1170 square feet.

Two-Level Master Schedule: An approach to master scheduling in an environment that uses product family plans with a variety of options at the end item level. The first level creates a master schedule at the family level for general planning purposes. The second level uses customer specific option choices to provide improved master schedules at the option level.

Two-Bin system: An inventory ordering system in which the time to place an order for an item is indicated when the first bin is empty. The second bin contains sufficient supply until the order is received. The empty bin provides a capability similar to the Kanban in a Lean system.

Two-Way Scorecards: A scorecard that allows a supplier to provide feedback on how well a buyer is providing it with information, paying on time, and managing other key elements of bilateral performance.

Ubiquity: A raw material that is found at all locations.

UI: User Interface.

Umbrella rate: An ICC rate-making practice that held rates to a particular level to protect the traffic of another mode.

Unbundled Payment/Remittance: Process where payment is delivered separately from its associated detail.

LETTER U

Under Utilization: To use an asset too little or inefficiently. May refer to equipment, warehouse space, trailer or container space, labor hours, etc.

Uniform Code Council (UCC): See *GS1*

Uniform Communication Standard (UCS): A set of standard transaction sets for the grocery industry that allows computer-to-computer, paperless exchange of documents between trading partners. Using Electronic Data Interchange, UCS is a rapid, accurate and economical method of business communication; it can be used by companies of all sizes and with varying levels of technical sophistication.

Uniform Product Code (UPC): A standard product numbering and bar coding system used by the retail industry. UPC codes are administered by the Uniform Code Council; they identify the manufacturer as well as the item, and are included on virtually all retail packaging.

Uniform Resource Locator (URL): A string that supplies the Internet address of a website or resource on the World Wide Web, along with the protocol by which the site or resource is accessed. The most common URL type is http;//, which gives the Internet address of a web page. Some other URL types are gopher://, which gives the Internet address of a Gopher directory, and ftp:;//, which gives the network location of an FTP resource.

Uniform Warehouse Receipts Act: The act that sets forth the regulations governing public warehousing. The regulations define the legal responsibility of a warehouse manager and define the types of receipts issued.

LETTER U

Unit Cost: The cost associated with a single unit of product. The total cost of producing a product or service divided by the total number of units. The cost associated with a single unit of measure underlying a resource, activity, product or service. It is calculated by dividing the total cost by the measured volume. Unit cost measurement must be used with caution as it may not always be practical or relevant in all aspects of cost management.

Unit Load: A single item, a number of items, or bulk material which is arranged and restrained so that the load can be stored, picked up, and moved between two locations as a single mass. A pallet of cases which is shrink wrapped is a good example of a unit load.

Unit Load Device (ULD): Refers to airfreight containers and pallets.

Unit of Driver Measure: The common denominator between groupings of similar activities. Example: 20 hours of process time is performed in an activity center. This time equates to a number of common activities varying in process time duration. The unit of measure is a standard measure of time such as a minute or an hour.

Unit of Measure (UOM): The unit in which the quantity of an item is managed, e.g., pounds, each, box of 12, package of 20, or case of 144. Various UOMs may exist for a single item. For example, a product may be purchased in cases, stocked in boxes and issued in single units.

Unit-of-Measure Conversion: A conversion ratio used whenever multiple units-of-measure are used with the same item. For example, if you purchased an item in cases (meaning that your purchase order stated a number of cases rather than a number of pieces) and then stocked the item in eaches, you would require a conversion to allow your system to calculate how many eaches are represented by a quantity of cases. This way, when you received the cases, your system would automatically convert the case quantity into an each quantity.

LETTER U

United Nations Standard Product and Service Code (UN/SPSC): - developed jointly between the UN and Dun & Bradstreet (D&B). Has a five level coding structure (segment, family, class, commodity, business function) for nearly 9000 products.

United States Railway Association: The planning and funding agency for Conrail; created by the 3-R Act of 1973.

Unitize: To consolidate a number of packages into one unit; the several packages are strapped, banded, or otherwise attached together.

Unitization: In warehousing, the consolidation of several units (cartons or cases) into larger units to improve efficiency in handling and to reduce shipping costs.

Units Moved per Man Hour: Measures the number of units moved in per man hour.

Unplanned Order: Orders which are received that do not fit into the volumes prescribed by the plans developed from forecasts.

Upcharges: Charges added to a bill, particularly a freight bill, to cover additional costs that were not envisioned when a contract was written. These might include costs related to rapidly increasing fuel charges or costs related to government mandates.

Upsell: The practice of attempting to sell a higher-value product to the customer.

Upside Flex Agreement: This is a flexibility agreement with a supplier where the upside and down side are negotiated in advance for lead-time, cost, etc.

LETTER U/V

Upside Production Flexibility: The number of days required to complete manufacture and delivery of an unplanned sustainable 20% increase in end product supply of the predominant product line. The one constraint that is estimated to be the principal obstacle to a 20% increase in end product supply, as represented in days, is Upside Flexibility: Principal Constraint. Upside Flexibility could affect three possible areas: direct labor availability, internal manufacturing capacity, and key components or material availability.

Upstream: Refers to the supply side of the supply chain. Upstream partners are the suppliers who provide goods and services to the organization needed to satisfy demands which originate at point of demand or use, as well as other flows such as return product movements, payments for purchases, etc.

Urban Mass Transportation Administration: Agency of the U.S. Department of Transportation responsible for developing comprehensive mass transport systems for urban areas and for providing financial aid to transit systems.

Usage Rate: Measure of demand for product per unit of time (e.g., units per month, etc.).

Validation: To check whether a document is the correct type for a particular EDI system, as agreed upon by the trading partners, in order to determine whether the document is going to or coming from an authorized EDI user.

Value Added: Increased or improved value, worth, functionality or usefulness.

Value-Added Network (VAN): A company that acts as a clearing-house for electronic transactions between trading partners. A third-party supplier that receives EDI transmissions from sending trading partners and holds them in a “mailbox” until retrieved by the receiving partners.

LETTER V

Value-Added Productivity Per Employee: Contribution made by employees to total product revenue minus the material purchases divided by total employment. Total employment is total employment for the entity being surveyed. This is the average full-time equivalent employee in all functions, including sales and marketing, distribution, manufacturing, engineering, customer service, finance, general and administrative, and other. Total employment should include contract and temporary employees on a full-time equivalent (FTE) basis. Calculation: [(Total Product Revenue) - (External Direct Material)] / [FTE's]

Value-Adding/Nonvalue-Adding: Assessing the relative value of activities according to how they contribute to customer value or to meeting an organization's needs. The degree of contribution reflects the influence of an activity's cost driver(s).

Value Analysis: A method to determine how features of a product or service relate to cost, functionality, appeal and utility to a customer (i.e., engineering value analysis).

Value Based Return (VBR): A measure of the creation of value. It is the difference between economic profit and capital charge.

Value Chain: A series of activities, which combined, define a business process; the series of activities from manufacturers to the retail stores that define the industry supply chain.

Value Chain Analysis: A method to identify all the elements in the linkage of activities a firm relies on to secure the necessary materials and services, starting from their point of origin, to manufacture, and to distribute their products and services to an end user.

LETTER V

Value Engineering Change Proposal (VECP): A change proposal resulting from an organized effort directed at analyzing the function of Department of Defense systems, equipment, facilities, procedures, and supplies for the purpose of achieving the required function at the lowest total cost of effective ownership, consistent with requirements for performance, reliability, quality, and maintainability.

Value-of-service pricing: Pricing according to the value of the product being transported; third-degree price discrimination; demand-oriented pricing; charging what the traffic will bear.

Value of Transfers: The total dollar value (for the calendar year) associated with movement of inventory from one “bucket” into another, such as raw material to work-in-process, work-in-process to finished goods, plant finished goods to field finished goods or customers, and field finished goods to customers. Value of Transfers is based on the value of inventory withdrawn from a certain category and is often approached from a costing perspective, using cost accounts. For example, Raw Materials Value of Transfers is the value of transfers out of the raw material cost accounts (you may have cost centers associated with inventory locations, but all "raw ingredients" usually share common cost accounts or can be rolled up into one financial view). The same goes for WIP. Take the manufacturing cost centers and look at the total value of withdrawals from those cost centers. While Average Gross Inventory represents the value of the inventory in the cost center at any given time, the Value of Transfers is the total value of inventory leaving the cost center during the year. The value of transfers for Finished Goods is, in theory, equivalent t

Value Proposition: What the supply chain member offers to other members. To be truly effective, the value proposition has to be two-sided; a benefit to both buyers and sellers.

Value Stream: All activities, both value added and nonvalue added, required to bring a product from raw material state into the hands of the customer, bring a customer requirement from order to delivery and bring a design from concept to launch.

LETTER V

Value Stream Mapping: A pencil and paper tool used in two stages: 1. Follow a product's production path from beginning to end and draw a visual representation of every process in the material and information flows. 2. Then draw a future state map of how value should flow. The most important map is the future state map.

Variable Cost: A cost that fluctuates with the volume or activity level of business.

Vehicle Telemetric Systems: A system comprised of vehicle interface units (VIUs), wireless gateways, and a central host that monitors and tracks a driver and his vehicle performance in an effort to provide a higher level of security.

Velocity: Rate of product movement through a warehouse

Vendor: The manufacturer or distributor of an item or product line.

Vendor Code: A unique identifier, usually a number and sometimes the company's DUNS number, assigned by a Customer for the Vendor it buys from. Example; a Grocery Store Chain buys Oreo's from Nabisco. The Grocery Store Chain, for accounting purposes, identifies Nabisco as Vendor #76091. One company can have multiple vendor codes. Example; Welch's Foods sells many different products. Frozen grape juice concentrate, chilled grape juice, bottled grape juice, and grape jelly. Because each of these items is a different type of product, frozen food, chilled food, beverages, dry food, they may have a different buyer at the Grocery Store Chain, requiring a different vendor code for each product line.

Vendor-Managed Inventory (VMI): The practice of companies or retailers making suppliers responsible for determining order size and timing, usually based on receipt of retail POS and inventory data from their customer. Its goal is to increase inventory turns and reduce stock outs. Its goal is to increase retail inventory turns and reduce stock outs. It may or may not involve consignment of inventory (supplier ownership of the inventory located at the customer).

LETTER V

Vertical Hub/Vertical Portal: Serving one specific industry. Vertical portal websites that cater to consumers within a particular industry. Similar to the term "vertical industry", these websites are industry specific, and like a portal, they make use of Internet technology by using the same kind of personalization technology. In addition to industry specific vertical portals that cater to consumers, another definition of a vertical portal is one that caters solely to other businesses.

Vertical Integration: A style of management control. Vertically integrated companies are united through a hierarchy with a common owner. Usually each member of the hierarchy produces a different product or (market- specific) service, and the products combine to satisfy a common need. Vertical integration defines the degree to which a firm owns its upstream suppliers and its downstream buyers it is typified by one firm engaged in different parts of production (e.g. growing raw materials, manufacturing, transporting, marketing, and/or retailing).

Vessell: A floating structure designed for transport.

VICS: Voluntary Interindustry Commerce Standards. The retail industry standards body responsible for the CPFR standard, among other things. VICS is a not-for-profit association whose mission is to take a global leadership role in the development of business guidelines & specifications; facilitating implementation through education and measurement, resulting in the improvement of the retail supply chain efficiency and effectiveness, which meet or exceed customer and consumer expectations.

Viral Marketing: The concept of embedding advertising into web portals, pop-ups and as e-mail attachments to spread the word about products or services that the target audience may not otherwise have been interested in.

LETTER V/W

Virtual Corporation: 1) A business that has few employees and outsources nearly all its work. 2) .A consortium of businesses that pursue a common goal. For example, several companies work together to produce a technologically advanced product.

Visibility: The ability to access or view pertinent data or information as it relates to logistics and the supply chain, regardless of the point in the chain where the data exists.

Vision: The vision of the business is a statement which reflects the aspirations of its management and specifies its intended direction or future destination.

Vision Systems: : A type of data collection similar to bar code data collection, which instead uses the image, or multiple images of the item to confirm and update information systems. Vision systems do not required (but cold read) a bar code, and can be effective for materials which are difficult to affix codes to. However, the item images must be sufficiently different for each product for the system to differentiate.

Voice Activated or Voice Directed: Systems which guide users such as warehouse personnel via voice commands as they pick or put away goods. Operators will confirm locations and products using voice commands.

Voice of the Customer: A business term to describe the process of capturing a customer's requirements using market research to determine a customer’s wants and needs. This is then organized into a hierarchical structure and prioritized by importance and satisfaction with current alternatives.

Wagner-Whitin Algorithm: A dynamic programming lot sizing model that evaluates multiple alternatives that consider period demand and production, holding, and setup costs to produce an optimal lot size that varies for each period as required.

LETTER W

Wall-to-Wall Inventory: An inventory control technique where all inventory locations within the warehouse are counted at one time as opposed to doing a cycle count of smaller groups.

Warehouse: Storage place for products. Principal warehouse activities include receipt of product, storage, shipment, and order picking.

Warehouse Control System (WCS): A software application that directs the real-time activities within warehouses and distribution centers. The WCS is responsible for keeping everything running smoothly, maximizing the efficiency of the material handling subsystems and often, the activities of the warehouse associates themselves. It provides a uniform interface from the WMS to a broad range of material handling equipment such as AS/RS, carousels, conveyor systems, diverters, sorters, palletizers, etc.

Warehouse Location: The place where a product is stored in the warehouse. Typically consists of a sequence of letters or number which identifies the aisle, bay and shelf, etc.

Warehouse Management System (WMS): The systems used in effectively managing warehouse business processes and direct warehouse activities, including receiving, putaway, picking, shipping, and inventory cycle counts. Also includes support of radio-frequency communications, allowing real-time data transfer between the system and warehouse personnel. They also maximize space and minimize material handling by automating putaway processes.

Warehousing: The storing (holding) of goods.

LETTER W

Warranty: An obligation or guarantee that a product or service sold is as factually stated or legally implied by the seller. Oftentimes, warranties provide a specific remedy, such as repair or replacement, in the event the product or service fails to meet the warranty.

Warranty Costs: Includes materials, labor, and problem diagnosis for products returned for repair/refurbishment.

Waste: Any activity or process that does not add value to the goods or services required by the customer. Examples of waste include move time, counting inventory, inspection, the production of defective material, rework, etc. Waste is considered to cause increased cost, lead time and quality problems while not adding value, and may be created by vendors, personnel, equipment, incorrect process parameters and many other factors.

Waste Electrical and Electronic Equipment (WEEE): Waste Electrical and Electronic Equipment is a loose category of surplus, obsolete, broken, or discarded electrical or electronic devices. The processing of electronic waste in developing countries causes serious health and pollution problems due to lack of containment, as do unprotected landfilling (due to leaching) and incineration. The Basel Convention and regulation by the European Union and individual United States aim to reduce these problems. Reuse and computer recycling are promoted as alternatives to disposal as trash.

Waterway Use Tax: A per-gallon tax assessed barge carriers for use of the waterways.

Wave Generation: A method of generating picking instructions (picklists or RF prompts) in defined groups based on specific criteria such as customer, carrier, delivery route, shipment pickup time, etc.

LETTER W

Wave Picking: A variation on zone picking where rather than orders moving from one zone to the next for picking, all zones are picked at the same time and the items are later sorted and consolidated into individual orders/shipments. Wave picking is the quickest method for picking multi item orders however the sorting and consolidation process can be tricky. Picking waves are often designed to isolate shipments to specific carriers, routes, etc. See also batch picking, zone picking A more general definition of wave picking would simply be a method where a group of orders is released to the warehouse for picking and the next group (wave) is not released until the first wave has processed through the pick area.

Waybill: Document containing description of goods that are part of common carrier freight shipment. Show origin, destination, consignee/consignor, and amount charged. Copies travel with goods and are retained by originating/delivering agents. Used by carrier for internal record and control, especially during transit. Not a transportation contract.

Web: A computer term used to describe the global Internet.

Web 2.0: These technologies, which rely on user collaboration, include Web services, peer-to-peer networking, blogs, podcasts, and online social networks.

Web Browser: A client application that fetches and displays web pages and other World Wide Web resources to the user.

Web Services: A computer term for information processing services that are delivered by third parties using internet portals. Standardized technology communications protocols; network services as collections of communication formats or endpoints capable of exchanging messages.

Web Site: A location on the Internet.

LETTER W

Weight Break: The shipment volume at which the LTL charges equal the TL charges at the minimum weight.

Weight Confirmation: The practice of confirming or validating receipts or shipments based on the weight.

Weight-Losing Raw Material: A raw material that loses weight in processing

Weighted-Point Plan: A method of analyzing a group of candidates (employees, suppliers, etc.) using a rating approach that gathers data and assigns weights to each evaluation category. A weighted sum for each candidate is obtained and a comparison made. The weights used should sum to 100% for all.

What If Scenarios: A method to determine the effect different costs or investments have on profit and other financial indicators. Examples of cost or investments that would be evaluated are financial effects of different pricing models, warehousing options, number of employees or raw materials options.

What You See Is What You Get (WYSIWYG): An editing interface in which a file created is displayed as it will appear to an end-user.

Wide Area Network (WAN): A computer network that covers a broad area (i.e., any network whose communications links cross metropolitan, regional, or national boundaries. The largest and most well-known example of a WAN is the Internet.

Wi-Fi: A popular technology that allows electronic devices to exchange data wirelessly using radio waves. Wi-Fi is the dominant way to connect Radio Frequency devices such as scanners in a warehouse.

LETTER W

Wikis: Web based services such as those found in Wikipedia. Wikis are systems for collaborative publishing which allow many authors to contribute to an online document or discussion.

Will Call: The practice of taking orders that will be picked up at the selling facility by the buyer. An area where buyers can pick up an order at the selling facility. This practice is widely used in the service parts business.

Windows Meta File (WMF): A vector graphics format for Windows-compatible computers used mostly or word processing clip art.

Work Breakdown Structure (WBS): A complete line by line breakdown of the products, services, and activities that will be required to fulfill a contractual obligation.

Work-in-Process (WIP): Parts and subassemblies in the process of becoming completed finished goods. Work in process generally includes all of the material, labor and overhead charged against a production order which has not been absorbed back into inventory through receipt of completed products.

Work Sequence: Defined steps and activities that must be performed in order for the work to be accomplished.

World Trade Organization (WTO): An organization established on January 1, 1995 replacing the previous General Agreement on Tariffs and Trade GATT that forms the cornerstone of the world trading system.

World Wide Web (WWW): A "multimedia hyper linked database that spans the globe" and lets you browse through lots of interesting information. Unlike earlier Internet services, the 'Web' combines text, pictures, sounds, and even animations, and it lets you move around with a click of your computer mouse.

LETTERS X/Y/Z

X12: The ANSI standard for interindustry electronic interchange of business transactions.

Yard Management System (YMS): A system which is designed to facilitate and organize the coming, going and staging and visibility of trucks and trucks with trailers in the parking "yard" that serves a warehouse, distribution or manufacturing facility.

Yield: The ratio of usable output from a process to its input.

YMS: See *Yard Management System*

Yokoten: A term Toyota adopted to capture the idea of horizontal transfer of information and knowledge across an organization. Yokoten is a two-way street, requiring proactive effort from both those acquiring and developing the knowledge and those who could benefit from greater understanding of the requirements for success.

Zero Inventory: A Just-In-Time Inventory Control term where emphasis is placed on reducing inventory to minimal levels to reduce costs and promote organizational effectiveness.

Zone of Rate Flexibility: Railroads are permitted to raise rates by a percentage increase in the railroad cost index determined by the ICC; rates may be raised by 6% per year through 1984 and 4% thereafter.

Zone of Rate Freedom: Motor carriers are permitted to raise or lower rates by 10% in one year without ICC interference; if the rate change is within the zone of freedom, the rate is presumed to be reasonable.

Zone of Reasonableness: A zone or limit within which air carriers are permitted to change rates without regulatory scrutiny; if the rate change is within the zone, the new rate is presumed to be reasonable.

LETTER Z -

Zone Picking: A method of picking orders where a warehouse is divided into several pick zones with order pickers assigned to a specific zone and only picking the items in that zone, orders are moved from one zone to the next (usually on conveyor systems) as they are picked (also known as "pick-and-pass"). See also batch picking, wave picking.

Zone price: The constant price within the zone.

Zone Skipping: For shipments via the US Postal Service, depositing mail at a facility one or more zones closer to the destination. This option would benefit customers operating in close proximity to a zone border or shipping sufficient volumes to offset additional transportation costs. Can also be used with UPS/FedEx but these companies tend to work with carried to do a truckload shipment into a zone and use UPS to do the last mile delivery, reduced lead time and cost.

10 + 2 Rule: A rule instituted by the United States Customs and Border Protections (US CBP). 10+2 requires cargo information, for security purposes, to be transmitted to the US CBP at least 24 hours before goods are loaded onto an ocean vessel for shipment into the U.S. 10+2 is pursuant to section 203 of the SAFE Port Act, and requires importers to provide 10 data elements to the US CBP, as well as 2 more data elements from the carrier.
The following 10 data elements are required from the importer: Manufacturer (or supplier) name and address. Seller (or owner) name and address Buyer (or owner) name and address. Ship-to name and address Container stuffing location
Consolidator (stuffer) name and address
Importer of record number/foreign trade zone applicant identification number
Consignee number(s)
Country of origin
Commodity Harmonized Tariff Schedule number From the carrier, 2 data elements are required: Vessel stow plan + Container status messages

NUMBERS

24-hour Manifest Rule (24-hour Rule): U.S. Customs rule requiring carriers to submit a cargo declaration 24 hours before cargo is laden aboard a vessel at a foreign port.

24/7: Referring to operations that are conducted 24 hours a day, 7 days a week

24/7/365: Referring to operations that are conducted 24 hours a day, 7 days a week, 365 days per year, with no breaks for holidays, etc

3D Loading: 3D loading is a method of space optimizing designed to help quickly and easily plan the best compact arrangement of any 3D rectangular object set (boxes) within one or more larger rectangular enclosures (containers). It's based on three-dimensional, most-dense packing algorithms.

3D Printing: A technology that uses printer like devices to apply layers of metal or plastic in patterns that result in a finished product. 3D printing is similar to ink jet printing in that a processor controls how much material is applied, and where it is applied. 3D printing may offer the possibility of building spare parts on demand virtually anywhere in the world that it may be needed versus carrying an inventory of old parts. It can also be used to create items with very complex designs. The time required to 'print' an item makes this process not economical for large volume requirements.

5-Point Annual Average: Method frequently used in PMG studies to establish a representative average for a one year period.

Calculation: [12/31/98 + 3/31/98 + 6/30/99 + 9/30/99 + 12/31/99] / 5

NUMBERS

5-S Program: A program for organizing work areas. Sometimes referred to as elements, each of the five components of the program begins with the letter "S." They include sort, systemize, shine or sweep, standardize, and sustain. In the UK, the concept is converted to the 5-C program comprising five comparable components: clear out, configure, clean and check, conformity, and custom and practice.
Sort —get rid of clutter; separate out what is needed for the operations. *Systemize/Set in Order* —organize the work area; make it easy to find what is needed. *Shine* —clean the work area; make it shine.
Standardize —establish schedules and methods of performing the cleaning and sorting.
Sustain —implement mechanisms to sustain the gains through involvement of people, integration into the performance measurement system, discipline, and recognition.
The 5-S program is frequently combined with precepts of the Lean Manufacturing Initiative. Even when used separately, however, the 5-S (or 5-C) program is said to yield excellent results.

5 Whys: The five whys is a question asking method which is used to explore the cause/effect relationships underlying a particular problem or process. When an answer is given to a question continue by asking why the answer is appropriate. This allows for a drill down to determine a root cause of a defect or problem, or rationale for the process.

6-S: An expanded definition of 5-S which includes *Safety*

NUMBERS

7 Wastes: One of the basic concepts of Lean management, the seven 'deadly wastes' are best remembered by the acronym TIM WOOD:
Transportation - moving products that are not actually required to perform the processing.
Inventory - all components, work-in-progress and finished product not being processed.
Motion - people or equipment moving or walking more than is required to perform the processing.
Waiting - waiting for the next production step.
Overproduction - too much production or ahead of demand.
Over Processing - due to poor tool or product design creating activity.
Defects - the effort involved in inspecting for and fixing defects.

80-20 Rule: States that, for many events, roughly 80% of the effects come from 20% of the causes. Business management thinker Joseph M. Juran suggested the principle and named it after Italian economist Vilfredo Pareto, who observed in 1906 that 80% of the land in Italy was owned by 20% of the population; he developed the principle by observing that 20% of the pea pods in his garden contained 80% of the peas.

References & Bibliography

Some terms used in the Supply Chain Vision's *"Supply Chain Management Terms and Glossary"* are based on the following sources:

The **Supply-Chain Council's** *Supply-Chain Operations Reference-model (SCOR)*. For more information on the Supply-Chain Council and SCOR, visit **www.supply-chain.org**

Information Access's *Glossary of Data Integration Terminology* . For more information on Information Access, visit **www.infoaccess.net**

Inbound Logistics' *Magazine Glossary.* For more information on Inbound Logistics, visit **www.inboundlogistics.com**

International Chamber of Commerce's *International Commerce Terms (INCOTERMS)* . For more information on the ICC, visit **www.iccwbo.org**

Manufacturing System's
Glossary of Special Terms used in Client/Server Computing, Production Management and Process Automation . For more information on MSI, visit **www.manufacturingsystems.com**

The **Performance Measurement Group's** Supply Chain Metrics Definitions & Calculations. For more information on PMG, visit **www.pmbenchmarking.com**

The **Consortium for Advanced Manufacturing-International's ABC/M Glossary**. For more information on Activity Based Costing and advanced manufacturing practices, visit **www.cam-i.org**