

# Neustro Glossary

## Commonly Used Terms and Definitions

Terminology	Definition
<b>ABC Code</b>	The classification of a group of items in decreasing order of annual currency volume (i.e. price multiplied by projected volume) or other criteria. This array is then split into three classes, called A, B, and C. The A group usually represents 10% to 20% by number of items and 50% to 70% by projected value/volume. The next grouping, B, usually represents about 20% of the items and about 20% of the dollar volume. The C class contains 60% to 70% of the items and represents about 10% to 30% of the dollar volume. The ABC principle states that effort and money can be saved through applying looser controls to the low-value-volume class items than will be applied to high-dollar-volume class items. The ABC principle is applicable to inventories, purchasing, sales, etc.
<b>ABCD Checklist</b>	A proprietary way to benchmark a company's planning and control processes using MRP LTD's 20 point checklist. If a company scores 18 out of the 20 points it is awarded Class "A" status. Consultancy, Ollie Wight, developed a similar benchmarking system to identify World Class MRP users.
<b>Abnormal Demand</b>	An unanticipated customer order. This order may not be in the sales plan or may come from an unanticipated source. It can also be an unusually large order that consumes available-to-promise at the expense of satisfying other customer orders
<b>Absorption Costing</b>	An approach to inventory valuation in which variable costs and a portion of fixed costs are assigned to each unit of production. The fixed costs are usually allocated to units of output on the basis of direct labour hours, machine hours, or material costs.
<b>Action days</b>	Shows the number of days, positive or negative, that the transaction should be pushed forward or backwards
<b>Action Message</b>	An action message is a system-generated suggestion to change an existing replenishment order. The master scheduling calculation generates action messages in response to changed requirements. This could be a due date or quantity that has changed since the order was firmed. You can decide whether to make the actual changes.

<b>Activity Based Costing (ABC)</b>	A cost accounting system that accumulates costs based on activities performed and then uses cost drivers to allocate these costs to products or other bases, such as customers, markets, or projects. It is an attempt to allocate overhead costs on a more realistic basis than direct labour or machine hours as with traditional cost accounting.
<b>Advanced Planning and Scheduling (APS)</b>	Another name given to MRPII and ERP systems that feature finite capacity planning and scheduling tools along side traditional infinite capacity material and resource requirements planning tools. Such systems will include optimisation and "what if" features providing for the ability to simulate the effect of changes to constrained schedules. By allowing for the manual or automatic selection of alternative materials and resources these tools can be used to optimise the schedule and generate exception reports at each level of the bill-of-material.
<b>Aggregate Inventory Management</b>	Establishing the overall level (currency value) of inventory desired and implementing controls to achieve this goal.
<b>Allocation</b>	The classification of quantities of items that have been assigned to specific orders, but have not yet been released from inventory, to production or customer orders. In other words an allocation is an "uncashed" warehouse requisition.
<b>Anticipated Delay Report</b>	A report, normally issued by both manufacturing and purchasing to the material planning function, regarding jobs or purchase orders that will not be completed on time and explaining why the jobs or purchases are delayed and when they will be completed. This report is an essential ingredient of the closed-loop MRP system.
<b>Arrival Date</b>	The date purchased material is due to arrive at the receiving site. The arrival date can be input, it can be equal to the current due date, or it can be calculated from the ship date plus transit time.
<b>Assemble-to-Order</b>	A production environment where a good or service can be assembled after receipt of a customer's order. The key components (bulk, semi finished, intermediate, subassembly, fabricated, purchased, packaging, etc.) used in the assembly or finishing process are planned and possibly stocked in anticipation of a customer order. Receipt of an order initiates assembly of the customized product. This strategy is useful where a large number of end products (based on the selection of options and accessories) can be assembled from common components.
<b>Available Hours</b>	The number of hours available for any given resource (e.g. machine, work centre, etc.) in a given time period. For example, a work centre with 2 machines running 2 six hour shift 5 days per week give available hours of 12 hours per shift, 24 hours per working day or 120 per normal week. Available hours may be modified by efficiency (see efficiency)

<b>Available Stock</b>	The on-hand inventory balance minus allocations, reservations, backorders, and (usually) quantities held for quality problems. Sometime referred to as Free Stock
<b>Available to promise (ATP)</b>	The uncommitted portion of a company's inventory and planned production, maintained in the master schedule to support customer order promising. The ATP quantity is the uncommitted inventory balance in the first period and is normally calculated for each period in which a receipt is scheduled. In the first period, ATP includes On-hand inventory less customer orders that are due and overdue. See also Capable to Promise.
<b>Back Scheduling</b>	A technique for calculating operation start dates and due dates. The schedule is computed starting with the due date for the order and working backward to determine the required start date and/or due dates for each operation based on the product routing and nominal capacity.
<b>Backflush</b>	The automatic deduction from inventory records of the component parts used in an assembly or subassembly after production has been reported complete. The components and the quantity to be consumed are calculated by exploding the bill of materials and multiplying by the production count of assemblies produced. Typically business systems may allow for consumption on release, during operation completion or at production completion.
<b>Backorder</b>	An unfilled customer order or commitment. A backorder is an immediate (or past due) demand against an item whose inventory is insufficient to satisfy the demand.
<b>Balanced Scorecard</b>	A performance measurement technique used to measure operational activities in context with financial performance. The essence the technique is used to understand and measure operational activities that impact on financial performance in order to ensure that small scale operational goals are in line larger financial targets.
<b>Batch Size</b>	The quantity of a parent item that is used as the basis for specifying the material requirements for production. The quantity per is expressed as the quantity to make the SBQ?, not to make only one of the parent
<b>Batch Processing</b>	A manufacturing technique in which parts are accumulated and processed together in a lot.
<b>Bench mark</b>	The continuous process of measuring the company's products, services, costs, and practices against those of competitors or firms that display the "best in class" achievements.

<b>Big Bang</b>	An implementation strategy that cuts over all parts of a new business system at the same time in a company or division, as opposed to a phased implementation, module by module. Characterized by switching-off the legacy system at the point the new system is switched on; this method is often recommended when introducing integrated systems where there is a dependency between functional areas. While it would be possible, for instance, to draw up a bill of material that is adequate only for either finance, planning, manufacturing or design but not for them all, the challenge is to implement an enterprise wide system that everyone can use from the start, sharing a common bill across all business functions.
<b>Bill of Material (BOM)</b>	A listing of all the subassemblies, intermediates, parts, and raw materials that go into a parent assembly showing the quantity of each required to make an assembly. It is used in conjunction with the master production schedule to determine the items for which purchase requisitions and production orders must be released to fulfil independent and dependent demand.
<b>Bill of Material Explosion</b>	The process of determining component identities, quantities per assembly, and other parent/ component relationship data for a parent item. Explosion may be single level, indented, or summarized.
<b>Bill of Resources</b>	A listing of the required capacity and key resources needed to manufacture one unit of a selected item or family. Rough-cut capacity planning uses these bills to calculate the approximate capacity requirements of the master production schedule. Resource planning may use a form of this bill.
<b>Blanket Purchase Order</b>	A long-term commitment to a supplier for material against which short-term releases will be generated to satisfy requirements. Often blanket orders cover only one item with predetermined delivery dates.
<b>Blow Through</b>	When a phantom bill of material which represents an item that is physically built, but rarely stocked, permits MRP logic to drive requirements straight through the phantom item to its component parts.
<b>Bottom Up</b>	Bottom-up re-planning. In MRP, the process of using pegging data to solve material availability or other problems. This process is accomplished by the planner (not the computer system), who evaluates the effects of possible solutions. Potential solutions include compressing lead time, cutting order quantity, substituting material and changing the Master Schedule
<b>Bottleneck</b>	A facility, function, department, or resource whose capacity is less than the demand placed upon it. For example, a bottleneck machine or work centre exists where jobs are processed at a slower rate than they are demanded.
<b>Bucket</b>	A time period, usually a day or a week by which demand may be aggregated for planning purposes.

<b>Bucketless</b>	An MRP, DRP, or other time-phased system in which all time-phased data are processed, stored, and usually displayed using dated records rather than defined time periods, or buckets.
<b>Buffer Stock</b>	see Safety Stock
<b>Bulk Issue</b>	Parts issued from stores to work-in-process inventory, but not based on a job order. They are issued in quantities estimated to cover requirements of individual work centres and production lines. The issue may be used to cover a period of time or to fill a fixed-size container.
<b>Business Plan</b>	A statement of long-range strategy for revenue, cost, and profit objectives usually accompanied by budgets, a projected balance sheet, and a cash flow statement. A business plan is usually stated in terms of currency and grouped by product family. The Sales and Operations plan, and the production plan, although frequently stated in different terms, should agree with each other and support delivery of the stated <b>Business Plan</b> .
<b>Business Process Reengineering (BPR)</b>	A procedure that in the fundamental rethinking and radical redesign of business processes to achieve dramatic organizational improvements in such critical measures of performance such as cost, quality, service, and speed. Any BPR activity is distinguished by its emphasis on process rather than functions and products.
<b>Buyer</b>	An individual whose functions may include supplier selection, negotiation, order placement, supplier follow-up, measurement and control of supplier performance, value analysis and evaluation of new materials and processes.
<b>Capable to Promise (CTP)</b>	To provide realistic product delivery dates based on actual and planned material availability, current production capacity and vendor lead times. See also Available-to-Promise
<b>Capacity Requirements Plan</b>	A time-phased plan of present and future load - the capacity required - on all resources based on the planned and released supply authorizations (i.e., orders) and the planned capacity (capacity available) of these resources over a span of time.
<b>Capacity Requirements Planning (CRP)</b>	The function of establishing, measuring, and adjusting limits or levels of capacity. In context the term <i>capacity requirements planning</i> is the process of determining in detail the amount of labour and machine resources required to accomplish the tasks of production. Open shop orders and planned orders in the MRP system are input to CRP, which through the use of parts routings and time standards translates these orders into hours of work by work centre by time period.
<b>Cellular Manufacture</b>	A manufacturing process that produces families of parts within a single line or cell of machines controlled by operators who work only within the line or cell. Cells may often be considered as single work centres for capacity planning purposes.

<b>Collaborative Planning, Forecasting and Replenishment (CPFR)</b>	An approach used by companies within a supply chain, working together to improve forecasting and planning excess inventory and lead-times can be reduced across the supply chain for the benefit (in principal) of all parties.
<b>Component</b>	The raw material, part, or subassembly that goes into a higher level assembly, compound, or other item. This term may also include packaging materials for finished items.
<b>Computer Aided Design (CAD)</b>	The use of computers in interactive engineering drawing and storage of designs. Programs complete the layout, geometric transformations, projections, rotations, magnifications, and cross-section views of a part and its relationship with other parts.
<b>Computer Integrated Manufacturing (CIM)</b>	The use of computers to program, direct, and control production equipment in the fabrication of manufactured items.
<b>Configurator</b>	A software tool that can be used to simplify the specification of customer orders for complex configurable products or systems. Typically the configurator tool would guide the user through allowable combinations of product option - such as features or dimensions - in order to arrive at a valid configuration and quote a price and/or delivery.
<b>Consignment Stock</b>	Inventories, generally of finished goods, that are in the care of customers, dealers, agents, or other party, but remain the property of the supplier until consumed or returned. See also Vendor Managed Inventory
<b>Consumable Stock</b>	Supplies or materials (such as lubricants, cleaning materials, or fuel) that are consumed or exhausted in the production or sale of goods or services.
<b>Continuous Improvement</b>	An ongoing effort to expose and eliminate root causes of waste through small, incremental steps. See also Kaizen.
<b>Control Group Cycle Counting</b>	A method used to identify inventory processing problem by the regular and repeated counting of a sample of inventory items over a period of time. Each time a count difference is found it would be investigated to identify the route cause and necessary corrective actions required. Over a period of time the common causes of count differences would be eliminated.
<b>Corrective Action</b>	The implementation of solutions resulting In the reduction or elimination of an identified problem.
<b>Cost of Goods Sold</b>	An accounting classification useful for determining the amount of direct materials, direct labour, and allocated overhead associated with the products sold during a given period of time.
<b>Cumulative Lead Time</b>	The longest planned length of time to accomplish the activity in question. For any item planned through MRP, it is found by reviewing the lead time for each bill of material path below the item; whichever path adds up to the greatest number defines cumulative lead time.

<b>Customer Relationship Management (CRM)</b>	The process of building profitable customer relationships through the delivery of highly targeted interactions at all customer touch points by aligning marketing, sales and service functions and systems.
<b>Cycle Counting</b>	An inventory accuracy audit technique where inventory is counted on a cyclic schedule rather than once a year. A cycle inventory count is usually taken on a regular, defined basis (often more frequently for high-value or fast-moving items and less frequently for low-value or slow-moving items). Most effective cycle counting systems require the counting of a certain number of items every workday with each item counted at a prescribed frequency. The key purpose of cycle counting is to identify items in error, thus triggering research, identification, and elimination of the cause of the errors.
<b>De-Kitting</b>	The process of returning components, assemblies or materials to inventory as a reversal of their issue to a production order.
<b>Delivery Lead Time</b>	The period of time that elapses between the receipt of a customers' order to the delivery of the goods or services to the customer.
<b>Demand Management</b>	The function of recognizing all demands for goods and services to support the marketplace. It involves doing what is required to help make the demand happen and prioritizing demand when supply is lacking. Proper demand management facilitates the planning and use of resources for profitable business results. It encompasses the activities of forecasting, order entry, order promising, and determining branch warehouse requirements, interplant orders, and service parts requirements.
<b>Demonstrated Capacity</b>	Proven capacity calculated from actual performance data, and usually expressed as the average number of items produced multiplied by the standard hours per item.
<b>Dependant Demand</b>	Demand that is directly related to or derived from the bill of material structure for other items or end products and determined by the demand for the parent item. Such demands are therefore calculated and need not and should not be forecast. A given inventory item may have both dependent and independent demand at any given time. For example, a part may simultaneously be the component of an assembly and sold as a service part.
<b>Dependant Forecast</b>	A forecast of components or materials derived from a forecast of the parent item. When applied to configurable products forecast demand for the generic parent may be split by options to determine the forecast requirement for optional parts or materials.
<b>Design for Manufacturability (DFM or DFMA)</b>	A product development approach that involves the manufacturing function in the initial stages of product design to ensure ease of manufacturing and assembly.
<b>Discrete Manufacturing</b>	The production of distinct items such as automobiles, appliances, or computers.

<b>Distribution</b>	The activities associated with the movement of material, usually finished goods or service parts, from the manufacturer to the customer. These activities encompass the functions of transportation, warehousing, inventory control, material handling, order administration, site and location analysis, industrial packaging, data processing, and the communications network necessary for effective management. It includes all activities related to physical distribution, as well as the return of goods to the manufacturer. In many cases, this movement is made through one or more levels of field warehouses.
<b>Distribution Requirements Planning (DRP)</b>	The function of determining the need to replenish inventory at branch warehouses. A time-phased order point approach is used where the planned orders at the branch warehouse level are "exploded" via MRP logic to become gross requirements on the supplying source. In the case of multilevel distribution networks, this explosion process can continue down through the various levels of regional warehouses (master warehouse, factory warehouse, etc.) and become input to the master production schedule. Demand on the supplying sources is recognized as dependent and standard MRP logic applies.
<b>Distribution Resource Planning (DRP II)</b>	The extension of Distribution Requirements Planning into the planning of the key resources contained in a distribution system: warehouse space, workforce, money, trucks, freight cars, etc.
<b>Due Date</b>	The date when purchased material or production material is due to be available for use.
<b>Dynamic Lead Time</b>	The lead time for manufactured items calculated based on operations times in the routing, and taking into account the availability of resources. For example part A may have a nominal lead time of 2 working days, planning for a Wednesday start sees the dynamic lead calculated at 2 days, where as planning for a Friday starts see the dynamic lead calculated at 4 days when taking into account the non-working weekend.
<b>Economic Order Quantity (EOQ)</b>	A type of fixed order-quantity model that determines the amount of an item to be purchased or manufactured at one time. The intent is to minimize the combined costs of acquiring and carrying inventory.
<b>Efficiency</b>	A factor of productive hours achieved in relation to the available hours
<b>Efficient consumer response (ECR)</b>	A term to encapsulate the sharing of data between supply chain players so that demand is highly visible to the supply chain thus allowing for, in theory, faster replenishment cycle times.
<b>Electronic Data Interchange (EDI)</b>	The paperless, electronic exchange of trading documents, such as purchase orders, shipment authorizations, advanced shipment notices, and invoices, using standardized document formats.
<b>Emergency Time Fence</b>	See Time Fence
<b>End Item</b>	A product sold as a completed item or repair part; any item subject to a customer order or sales forecast.

<b>Engineering Change</b>	A revision to a drawing or design released by engineering to modify or correct a part. The request for the change can be from a customer or from production, quality control, another department, or a supplier.
<b>Engineer to order (ETO)</b>	Products whose customer specifications require unique engineering design, significant customization, or new purchased components or materials. Each customer order results in a unique set of part numbers, bills of material, and routings.
<b>Enterprise Resource Planning (ERP)</b>	1) An accounting-oriented information system for identifying and planning the enterprise wide resources needed to take, make, ship, and account for customer orders. An ERP system differs from the typical MRP 11 system in technical requirements such as graphical user interface, relational database, use of fourth-generation language, and computer-assisted software engineering tools in development, client/server architecture, and open-system portability. 2) More generally, a method for the effective planning and control of all resources needed to take, make, ship, and account for customer orders in a manufacturing, distribution, or service company.
<b>Exception Message</b>	See Action Message
<b>Excess Stock</b>	Any inventory in the system that exceeds the minimum amount necessary to fulfil all known and forecast demand. Sometimes also referred to as Economic Stock.
<b>Expedite</b>	To rush or chase production or purchase orders that are needed in less than the normal lead time; to take extraordinary action because of an increase in relative priority.
<b>Explosion</b>	The MRP explosion identifies the sub-assemblies that need to be made, and the raw materials and components that need to be purchased.
<b>External Setup Time</b>	The time associated with elements of a setup procedure performed for the next job while the process or machine is running it's current job.
<b>Failure Mode and Effect Analysis (FMEA)</b>	A procedure in which each potential failure mode in every sub-item of an item is analyzed to determine its effect on other sub-items and on the required function of the item.
<b>Family</b>	A group of end items whose similarity of design and manufacture facilitates their being planned in aggregate, whose sales performance is monitored together, and, occasionally, whose cost is aggregated at this level.
<b>Feature</b>	A distinctive characteristic of a good or service. The characteristic is provided by an option, accessory, or attachment. For example, in ordering a new car, the customer must specify an engine type and size (option), but need not necessarily select an air conditioner (attachment).
<b>Fences</b>	See Time Fence

<b>Field Service</b>	The functions of installing and maintaining a product for a customer after the sale or during the lease. Field service may also include training and implementation assistance.
<b>Fill Rate</b>	Customer service ratio.
<b>Firm Planned Order (FPO)</b>	A planned order that can be frozen in quantity and time. The computer is not allowed to change it automatically; this is the responsibility of the planner in charge of the item that is being planned. This technique can aid planners working with MRP systems to respond to material and capacity problems by firming up selected planned orders. In addition, firm planned orders are the normal method of stating the master production schedule.
<b>First in, First out (FIFO)</b>	A method of inventory valuation for accounting purposes. The assumption is that the oldest inventory (first in) is the first to be used (first out), but there is no necessary relationship with the actual physical movement of specific items.
<b>Fixed Order Quantity</b>	A lot-sizing technique in MRP or inventory management that will always cause planned or actual orders to be generated for a predetermined fixed quantity, or multiples thereof, if net requirements for the period exceed the fixed order quantity.
<b>Flexibility</b>	The ability of the manufacturing system to respond quickly, in terms of range and time, to external or internal changes. Six different categories of flexibility can be considered: mix flexibility, design changeover flexibility, modification flexibility, volume flexibility, rerouting flexibility, and material flexibility (see each term for a more detailed discussion). In addition, flexibility involves concerns of product flexibility. Flexibility can be useful in coping with various types of uncertainty (regarding mix, volume, etc.).
<b>Flowchart</b>	A chart that shows the operations, transportation, storage, delays, inspections, etc., related to a process. Flowcharts are drawn to better understand processes.
<b>Focused Factory</b>	A plant established to focus the entire manufacturing system on a limited, concise, manageable set of products, technologies, volumes, and markets precisely defined by the company's competitive strategy, technology, and economics.
<b>Forecast</b>	An estimate of future demand. A forecast can be determined by mathematical means using historical data, it can be created subjectively by using estimates from informal sources, or it can represent a combination of both techniques.
<b>Forecasting</b>	The business function that attempts to predict sales and use of products so they can be purchased or manufactured in appropriate quantities in advance.

<b>Forward scheduling</b>	A scheduling technique where the scheduler proceeds from a known start date and computes the completion date for an order, usually proceeding from the first operation to the last. Dates generated by this technique are generally the earliest start dates for operations.
<b>Functional Requirements</b>	Critical characteristics.
<b>GAAP - Generally Accepted Accounting Principles</b>	Accounting practices that conform to conventions, rules, and procedures that have general acceptability by the accounting profession.
<b>Gantt Chart</b>	The earliest and best-known type of planning and control chart, especially designed to show graphically the relationship between planned performance and actual performance over time. Named after its originator, Henry L. Gantt, the chart is used (1) for machine loading, in which one horizontal line is used to represent capacity and another to represent load against that capacity; or (2) for monitoring job progress, in which one horizontal line represents the production schedule and another parallel line represents the actual progress of the job against the schedule in time.
<b>Gross Requirements</b>	The total of independent and dependent demand for a component before the netting of on-hand inventory and scheduled receipts.
<b>Group Technology (GT)</b>	A philosophy applied to manufactured products to identify common process requirements in order to group products into families that can be produced in self-contained production cells. See also Cellular Manufacturing
<b>Grouping</b>	Matching like operations and running them together sequentially, thereby taking advantage of a common setup.
<b>Independent Demand</b>	The demand for an item that is unrelated to the demand for other items. Demand for finished goods, parts required for destructive testing, and service parts requirements are examples of independent demand.
<b>Infinite Capacity Planning</b>	Calculation of the capacity required at work centres in the time periods required regardless of the capacity available to perform this work.
<b>Input</b>	Work arriving at a Workcentre.
<b>Input Output Control</b>	A technique for capacity control where planned and actual inputs and planned and actual outputs of a work centre are monitored. Planned inputs and outputs for each work centre are developed by capacity requirements planning and approved by manufacturing management. Actual input is compared to planned input to identify when work centre output might vary from the plan because work is not available at the work centre. Actual output is also compared to planned output to identify problems within the work centre.
<b>Internal Setup Time</b>	The time associated with elements of a setup procedure performed while the process or machine is not running.

<b>Inventory</b>	Those stocks or items used to support production (raw materials and work-in-process items), supporting activities (maintenance, repair, and operating supplies), and customer service (finished goods and spare parts). Demand for inventory may be dependent or independent.
<b>Inventory Management</b>	The branch of business management concerned with planning and controlling inventories.
<b>Item Number</b>	A number that serves to uniquely identify an item.
<b>Item Master File</b>	The Master record for an item. Typically, it contains identifying and descriptive data and control values (lead times, lot sizes, etc.) and may contain data on inventory status, requirements, planned orders, and costs. Item records are linked by bill of material records (or product structure records) thus defining the bill of material.
<b>Just in Time (JIT)</b>	A philosophy of manufacturing based on planned elimination of all waste and on continuous improvement of productivity. It encompasses the successful execution of all manufacturing activities required to produce a final product, from design engineering to delivery, and includes all stages of conversion from raw material onward. The primary elements of Just-in-Time are to have only the required inventory when needed; to improve quality to zero defects; to reduce lead times by reducing setup times, queue lengths, and lot sizes; to incrementally revise the operations themselves; and to accomplish these activities at minimum cost. In the broad sense, it applies to all forms of manufacturing-job shop, process, and repetitive-and too many service industries as well.
<b>Kaizen</b>	The Japanese term for improvement; continuing improvement involving everyone-managers and workers. In manufacturing, kaizen relates to finding and eliminating waste in machinery, labour, or production methods.
<b>Kanban</b>	A method of Just-in-Time production that uses standard containers or lot sizes with a single card attached to each. It is a pull system in which work centres signal with a card that they wish to withdraw parts from feeding operations or suppliers. The Japanese word Kanban, loosely translated, and means card, billboard, or sign. The term is often used synonymously or the specific scheduling system developed and used by the Toyota Corporation in Japan.
<b>Kit</b>	<ol style="list-style-type: none"> <li>1) The components of a parent item that have been pulled from stock and readied for movement to a production area.</li> <li>2) A group of repair parts to be shipped with an order.</li> </ol>
<b>Kitting</b>	The process of constructing and staging kits.
<b>Last in, First out (LIFO)</b>	A method of inventory valuation for accounting purposes. The assumption is made that the most recently received (last in) is the first to be used or sold (first out) for costing purposes, but there is no necessary relationship with the actual physical movement of specific items.

<b>Lead Time</b>	1) A span of time required to perform a process (or series of operations) 2) In a logistics context, the time between recognition of the need for an order and the receipt of goods. Individual components of lead time can include order preparation time, queue time, processing time, move or transportation time, and receiving and inspection time.
<b>Lead Time Offset</b>	A technique used in MRP where a planned order receipt in one time period will require the release of that order in an earlier time period based on the lead time for the item.
<b>Lean Enterprise</b>	A group of individuals, functions, and sometimes legally separate but operationally synchronized organizations. The value stream defines the lean enterprise. The objectives of the lean enterprise are to correctly specify value to the ultimate customer, and to analyze and focus the value stream so that it does everything from product development and production to sales and service in a way that actions that do not create value are removed and actions that do create value proceed in a continuous flow as pulled by the customer. Lean enterprise differs from a "virtual corporation" in which the organizational membership and structure keeps changing.
<b>Lean Manufacturing</b>	A philosophy of production that emphasizes the minimization of the amount of all the resources (including time) used in the various activities of the enterprise. It involves identifying and eliminating non-value-adding activities in design, production, supply chain management, and dealing with the customers. Lean producers employ teams of multi-skilled workers at all levels of the organization and use highly flexible, increasingly automated machines to produce volumes of products in potentially enormous variety.
<b>Load</b>	The amount of planned work scheduled for and actual work released to a facility, work centre, or operation for a specific span of time. Usually expressed in terms of standard hours of work or, when items consume similar resources at the same rate, units of production.
<b>Load Profile</b>	A display of future capacity requirements based on released and/or planned orders over a given span of time.
<b>Logistics</b>	1) In an industrial context, the art and science of obtaining, producing, and distributing material and product in the proper place and in proper quantities. 2) In a military sense (where it has greater usage), its meaning can also include the movement of personnel.
<b>Lot</b>	A quantity produced together and sharing the same production costs and specifications.
<b>Lot for Lot</b>	A lot-sizing technique that generates planned orders in quantities equal to the net requirements in each period.
<b>Lot size</b>	The amount of a particular item that is ordered from the plant or a supplier or issued as a standard quantity to the production process.

<b>Make-to-Order</b>	A production environment where a good or service can be made after receipt of a customer's order. The final product is usually a combination of standard items and items custom-designed to meet the special needs of the customer. Where options or accessories are stocked before customer orders arrive, the term assemble-to-order is frequently used.
<b>Make-to-Stock</b>	A production environment where products can be and usually are finished before receipt of a customer order. Customer orders are typically filled from existing stocks, and production orders are used to replenish those stocks.
<b>Manufacturing Lead Time</b>	The total time required to manufacture an item, exclusive of lower level purchasing lead time. For make-to-order products, it is the length of time between the release of an order to the production process and shipment to the final customer. For make-to-stock products, it is the length of time between the release of an order to the production process and receipt into finished goods inventory. Included here are order preparation time, queue time, setup time, run time, move time, inspection time, and put-away time.
<b>Manufacturing Process</b>	The series of operations performed upon material to convert it from the raw material or a semi-finished state to a state of further completion. Manufacturing processes can be arranged in a process layout, product layout, cellular layout, or fixed-position layout. Manufacturing processes can be planned to support make-to-stock, make-to-order, assemble-to-order, etc., based on the strategic use and placement of inventories.
<b>Manufacturing Resource Planning (MRP II)</b>	A method for the effective planning of all resources of a manufacturing company. Ideally, it addresses operational planning in units, financial planning in dollars, and has a simulation capability to answer "what-if" questions. It is made up of a variety of functions, each linked together: business planning, sales and operations planning, production planning, master production scheduling, material requirements planning, capacity requirements planning, and the execution support systems for capacity and material. Output from these systems is integrated with financial reports such as the business plan, purchase commitment report, shipping budget, and inventory projections in dollars. Manufacturing resource planning is a direct outgrowth and extension of closed-loop MRP.
<b>Master Planning</b>	A grouping of the business processes that includes the following activities: demand management (which includes forecasting and order servicing); production and resource planning; and master scheduling (which includes the final assembly schedule, the master schedule, and the rough-cut capacity plan).

<b>Master Production Scheduling (MPS)</b>	1) The anticipated build schedule for those items assigned to the master scheduler. The master scheduler maintains this schedule, and in turn, it becomes a set of planning numbers that drives material requirements planning. It represents what the company plans to produce expressed in specific configurations, quantities, and dates. The master production schedule is not a sales forecast that represents a statement of demand. The master production schedule must take into account the forecast, the production plan, and other important considerations such as backlog, availability of material, availability of capacity, and management policies and goals. 2) The result of the master scheduling process. The master schedule is a presentation of demand, forecast, backlog, the MPS, the projected on-hand inventory, and the available-to-promise quantity.
<b>Master Scheduling</b>	That process where the master schedule is reviewed and adjustments are made to the master production schedule to ensure that inventory levels and customer service goals are maintained and proper capacity and material planning occurs.
<b>Material Requirements Plan (MRP)</b>	The result from the process of material requirements planning.
<b>Material Requirements Planning (MRP)</b>	A set of techniques that uses bill of material data, inventory data, and the master production schedule to calculate requirements for materials. It makes recommendations to release replenishment orders for material. Further, because it is time-phased, it makes recommendations to reschedule open orders when due dates and need dates are not in phase. Time-phased MRP begins with the items listed on the MPS and determines (1) the quantity of all components and materials required to fabricate those items and (2) the date that the components and material are required. Time-phased MRP is accomplished by exploding the bill of material, adjusting for inventory quantities on hand or on order, and offsetting the net requirements by the appropriate lead times.
<b>Maximum Capacity</b>	
<b>Maximum Order Quantity</b>	An order quantity modifier, applied after the lot size has been calculated, that limits the order quantity to a predefined maximum.
<b>Milestones</b>	
<b>Min-max</b>	A type of order point replenishment system where the "min" (minimum) is the order point, and the "max" (maximum) is the "order up to" inventory level. The order quantity is variable and is the result of the max minus available and on-order inventory. An order is recommended when the sum of the available and on-order inventory is at or below the min.
<b>Minimum Order Quantity</b>	An order quantity modifier, applied after the lot size has been calculated, that increases the order quantity to a predefined minimum.
<b>Move Time</b>	The time that a job spends in transit from one operation to another in the plant.

<b>Need Date</b>	The date when an item is required for its intended use. In an MRP system, this date is calculated by a bill-of-material explosion of a schedule and the netting of available inventory against that requirement.
<b>Net Change MRP</b>	An approach in which the material requirements plan is continually retained in the computer. Whenever a change is needed in requirements, open order inventory status, or bill of material, a partial explosion and netting is made for only those parts affected by the change. Opposite to Regeneration MRP.
<b>Net Requirements</b>	In MRP, the net requirements for a part or an assembly are derived as a result of applying gross requirements and allocations against inventory on hand, scheduled receipts, and safety stock. Net requirements, lot-sized and offset for lead time, become planned orders.
<b>Nettable Location</b>	Stock in a nettable location will be included in MRP calculations whereas stock in non nettable locations will be ignored.
<b>Nominal Group Technique</b>	A technique, similar to brainstorming, used by teams to generate ideas on a particular subject. Team members are asked to silently come up with as many ideas as possible, writing them down. Each member is then asked to share one idea, which is recorded. After all the ideas are recorded, they are discussed and prioritized by the group.
<b>On Hand</b>	Stock available
<b>On-hand Balance</b>	The quantity shown in the inventory records as being physically in stock.
<b>On Time In Full (OTIF)</b>	The delivery was made on time (or within a time frame) and in full (as in what was ordered). However, subject to lots of interpretation, often by different parts of the same business) and may allow for pre-agreed shortages or re-scheduled deliveries
<b>Open Order</b>	1) A released manufacturing order or purchase order. 2) An unfilled customer order.
<b>Open Period</b>	Accounting time period for which the books will still accept adjusting entries and postings.
<b>Operation</b>	1) A job or task, consisting of one or more work elements, usually done essentially in one location. 2) The performance of any planned work or method associated with an individual, machine, process, department, or inspection. 3) One or more elements that involve one of the following: the intentional changing of an object in any of its physical or chemical characteristics; the assembly or disassembly of parts or objects; the preparation of an object for another operation, transportation, inspection, or storage; planning, calculating, or giving or receiving information.
<b>Operation Number</b>	A sequential number, usually two, three, or four digits long, such as 010, 020, 030, that indicates the sequence in which operations are to be performed within an item's routing.

<b>Operations Scheduling</b>	The actual assignment of starting or completion dates to operations or groups of operations to show when these operations must be done if The manufacturing order is to be completed on time. these dates are used in The dispatching function
<b>Order Entry</b>	The process of accepting and translating what a customer wants into terms used by the manufacturer or distributor. This can be as simple as creating shipping documents for finished goods in a make-to-stock environment, or it might be a more complicated series of activities, including design efforts for make-to-order products.
<b>Order Point</b>	A set inventory level where, if the total stock on hand plus on order falls to or below that point, action is taken to replenish the stock. The order point is normally calculated as forecasted usage during the replenishment lead time plus safety stock.
<b>Order Policy</b>	A set of procedures for determining the lot size and other parameters related to an order.
<b>Packing Slip</b>	A document that itemizes in detail the contents of a particular package, carton, pallet, or container for shipment to a customer. The detail includes a description of the items, the shipper's or customer's part number, the quantity shipped, and the stock keeping unit (SKU) of items shipped
<b>Pareto Principle</b>	A concept developed by Vilfredo Pareto, an Italian economist, which states, a small percentage of a group accounts for the largest fraction of the impact, value, etc. In an ABC classification, for example, 20% of the inventory items may constitute 80% of the inventory value.
<b>Part Number</b>	A number that serves to uniquely identify a part.
<b>Past Due</b>	A line item on an open customer order that has an original scheduled ship date that is earlier than the current date.
<b>Pegged Requirement</b>	A requirement that shows the next-level parent item (or customer order) as the source of the demand.
<b>Pegging</b>	In MRP and MPS, the capability to identify for any items the sources of its gross requirements and/or allocations. Pegging can be thought of as active where-used information.
<b>Period Order Quantity</b>	A lot-sizing technique under which the lot size is equal to the net requirements for a given number of periods, e.g., weeks into the future. The number of periods to order is variable, each order size equalizing the holding costs and the ordering costs for the interval.
<b>Perpetual inventory Control</b>	A physical inventory taken at some recurring interval, e.g., monthly, quarterly, or annual physical inventory.
<b>Phantom</b>	A bill-of-material coding and structuring technique used primarily for transient (non-stocked) sub- assemblies. For the transient item, lead time is set to zero and the order quantity to lot-for-lot. A phantom bill of material represents an item that is physically built, but rarely stocked, before being used in the next step or level of manufacturing.

	This permits MRP logic to drive requirements straight through the phantom item to its components, but the MRP system usually retains its ability to net against any occasional inventories of the item. This technique also facilitates the use of material for engineering and manufacturing.
<b>Physical Inventory</b>	1) The actual inventory itself. 2) The determination of inventory quantity by actual count. Physical inventories can be taken on a continuous, periodic, or annual basis
<b>Picking</b>	The process of withdrawing from stock the components to make assemblies or finished goods.
<b>Picking List</b>	A document that lists the material to be picked for manufacturing or shipping orders.
<b>Plan</b>	A predetermined course of action over a specified period of time that represents a projected response to an anticipated environment to accomplish a specific set of adaptive objectives.
<b>Planned Receipt</b>	An anticipated receipt against an open purchase order or open production order.
<b>Planning</b>	The process of setting goals for the organization and choosing various ways to use the organization's resources to achieve the goals.
<b>Planned Capacity</b>	
<b>Planned Issue</b>	A disbursement of an item predicted by MRP through the creation of a gross requirement or allocation.
<b>Planned Order</b>	A suggested order quantity, release date, and due date created by the planning system's logic when it encounters net requirements in processing MRR. In some cases, it can also be created by a master scheduling module. Planned orders are created by the computer, exist only within the computer, and may be changed or deleted by the computer during subsequent processing if conditions change. Planned orders at one level will be exploded into gross requirements for components at the next level. Planned orders, along with released orders, serve as input to capacity requirements planning to show the total capacity requirements by work centre in future time periods.
<b>Planning Bill of Material</b>	An artificial grouping of items or events in bill-of-material format used to facilitate master scheduling and material planning.
<b>Planning Horizon</b>	The amount of time a plan extends into the future. For a master schedule, this is normally set to cover a minimum of cumulative lead time plus time for lot sizing low-level components and for capacity changes of primary work centres or key suppliers. For longer term plans the planning horizon must be long enough to permit any needed additions to capacity.

<b>Planning Time Fence</b>	A point in time denoted in the planning horizon of the master scheduling process that marks a boundary inside of which changes to the schedule may adversely affect component schedules, capacity plans, customer deliveries, and cost. Planned orders outside the planning time fence can be changed by system planning logic. Changes inside the planning time fence must be manually changed by the master scheduler.
<b>Poka-Yoke</b>	Mistake-proofing techniques, such as manufacturing or setup activity designed in A way to prevent an error from resulting in A product defect. For example, in an assembly operation, if each correct part is not used, A sensing device detects that A part was unused and shuts down the operation, thereby preventing the assembler from moving the incomplete part to the next station or beginning another operation.
<b>Price Break</b>	A discount given for paying early, buying in quantities etc.
<b>Primary Operation</b>	A manufacturing step normally performed as part of a manufacturing parts Routing.
<b>Process</b>	<p>1) A planned series of actions or operations (e.g., mechanical, electrical, chemical, inspection, test) that advances a material or procedure from one stage of completion to another.</p> <p>2) A planned and controlled treatment that subjects materials or procedures to the influence of one or more types of energy (e.g. human, mechanical, electrical, chemical, or thermal) for the time required to bring about the desired reactions or results.</p>
<b>Process Capability</b>	Refers to the ability of the process to produce parts that conform to (engineering) specifications. Process capability relates to the inherent variability of a process that is in a state of statistical control.
<b>Process Manufacturing</b>	Production that adds value by mixing, separating, forming, and/or performing chemical reactions. It may be done in either batch or continuous mode.
<b>Process Hours</b>	The time required at any specific task to process the product.
<b>Production Control</b>	The function of directing or regulating the movement of goods through the entire manufacturing cycle from the requisitioning of raw material to the delivery of the finished products.
<b>Production Plan</b>	The agreed-upon plan that comes from the aggregate (production) planning function, specifically the overall level of manufacturing output planned to be produced, usually stated as a monthly rate for each product family (group of products, items, options, features, etc.). Various units of measure can be used to express the plan: units, tonnage, standard hours, number of workers, etc. The production plan is management's authorization for the master scheduler to convert it into a more detailed plan, that is, the master production schedule.

<b>Production Report</b>	A statement of the output of a production facility for a specified period. The information normally includes the type and quantity of output; workers' efficiencies; departmental efficiencies; costs of direct labour, direct material, and the like; overtime worked; and machine downtime.
<b>Production Schedule</b>	A plan that authorizes the factory to manufacture a certain quantity of a specific item. It is usually initiated by the production planning department.
<b>Projected Available Balance</b>	An inventory balance projected into the future. It is the running sum of on-hand inventory minus requirements plus scheduled receipts and planned orders.
<b>Pseudo</b>	An artificial grouping of items that facilitates planning.
<b>Pull Scheduling</b>	1) In production, the production of items only as demanded for use or to replace those taken for use. 2) In material control, the withdrawal of inventory as demanded by the using operations. Material is not issued until a signal comes from the user. 3) In distribution, a system for replenishing field warehouse inventories where replenishment decisions are made at the field warehouse itself, not at the central warehouse or plant.
<b>Purchased Part</b>	An item sourced from a supplier.
<b>Purchase Order</b>	The purchaser's authorization used to formalize a purchase transaction with a supplier. A purchase order, when given to a supplier, should contain statements of the name, part number, quantity, description, and price of the goods or services ordered; agreed-to terms as to payment, discounts, date of performance, and transportation; and all other agreements pertinent to the purchase and its execution by the supplier.
<b>Purchase Requisition</b>	An authorization to the purchasing department to purchase specified materials in specified quantities within a specified time.
<b>Purchasing Lead Time</b>	The total lead time required to obtain a purchased item. Included here are order preparation and release time; supplier lead time; transportation time; and receiving, inspection, and put-away time.
<b>Push Scheduling</b>	1) In production, the production of items at times required by a given schedule planned in advance. 2) In material control, the issuing of material according to a given schedule or issuing material to a job order at its start time. 3) In distribution, a system for replenishing field warehouse inventories where replenishment decision making is centralized, usually at the manufacturing site or central supply facility.
<b>Put-away</b>	Removing the material from the dock (or other location of receipt), transporting the material to a storage area, placing that material in a staging area and then moving it to a specific location, and recording the movement and identification of the location where the material has been placed.

<b>Quality</b>	Conformance to requirements or fitness for use. Quality can be defined through five principal approaches: (1) Transcendent quality is an ideal, a condition of excellence. (2) Product-based quality is based on a product attribute. (3) User-based quality is fitness for use. (4) Manufacturing-based quality is conformance to requirements. (5) Value-based quality is the degree of excellence at an acceptable price.
<b>Quality Function Deployment (QFD)</b>	A methodology designed to ensure that all the major requirements of the customer are identified and subsequently met or exceeded through the resulting product design process and the design and operation of the supporting production management system. QFD can be viewed as a set of communication and translation tools. QFD tries to eliminate the gap between what the customer wants in a new product and what the product is capable of delivering. QFD often leads to a clear identification of the major requirements of the customers. These expectations are referred to as the voice of the customer.
<b>Quantity Per</b>	The quantity of a component to be used in the production of its parent. This value is stored in the bill of materials and is used to calculate the gross requirement for components during the explosion process of MRP.
<b>Quarantine</b>	The setting aside of items from availability or sale until all required quality tests have been performed and conformance certified.
<b>Queue</b>	A waiting line. In manufacturing, the jobs at a given work centre waiting to be processed. As queues increase so do average queue time and work-in-process inventory.
<b>Queue Time</b>	The amount of time a job waits at a work before setup or work is performed on the job. Queue time is one element of total manufacturing lead time. Increases in queue time result in direct increases to manufacturing lead time and work-in-process inventories.
<b>Quotation</b>	A statement of price, terms of sale, and description of goods or services offered by a supplier to a prospective purchaser; a bid. When given in response to an inquiry, it is usually considered an offer to sell.
<b>Radio Frequency Identification (RFID)</b>	A much misunderstood and over-hyped technology that is normally associated with tracking articles and stock. Normally by the application of labels (which can be passive or active) to product, or products, and recording them passing sensors. Often believed to be a straight replacement for bar-coding, which in a majority of cases, isn't.
<b>Raw Material</b>	Purchased items or extracted materials that are converted via the manufacturing process into components and products.
<b>Receipt</b>	The physical acceptance of an item into a stocking location; and in ERP terms, the transaction reporting of this activity.

<b>Receiving</b>	The function encompassing the physical receipt of material, the inspection of the shipment for conformance with the purchase order (quantity and damage), the identification and delivery to destination, and the preparation of receiving reports.
<b>Regeneration MRP</b>	An MRP processing approach where the master production schedule is totally re-exploded down through all bills of material, to maintain valid priorities. New requirements and planned orders are completely recalculated or "regenerated" at that time.
<b>Reorder Point</b>	A set inventory level where, if the total stock on hand plus on order falls to or below that point, action is taken to replenish the stock. The order point is normally calculated as forecasted usage during the replenishment lead time plus safety stock.
<b>Reorder Quantity</b>	1) In a fixed-reorder quantity system of inventory control, the fixed quantity that should be ordered each time the available stock (on-hand plus on-order) falls to or below the reorder point. 2) In a variable reorder quantity system, the amount ordered from time period to time period will vary.
<b>Release</b>	The authorization to produce or ship material that has already been ordered.
<b>Requirements Explosion</b>	The process of calculating the demand for the components of a parent item by multiplying the parent item requirements by the component usage quantity specified in the bill of material.
<b>Rescheduling</b>	The process of changing order or operation due dates, usually as a result of their being out of phase with when they are needed.
<b>Reservation</b>	The process of designating stock for a specific order or schedule.
<b>Reserved Material</b>	Material on hand or on order that is assigned to specific future production or customer orders.
<b>Resource Planning</b>	Capacity planning conducted at the business plan level. The process of establishing, measuring, and adjusting limits or levels of long-range capacity. Resource planning is normally based on the production plan but may be driven by higher level plans beyond the time horizon for the production plan, e.g., the business plan. It addresses those resources that take long periods of time to acquire. Resource planning decisions always require top management approval.
<b>Revision Level</b>	A number or letter representing the number of times a part drawing or specification has been changed.

<b>Rough Cut Capacity Planning (RCCP)</b>	The process of converting the master production schedule into requirements for key resources, often including labour, machinery, warehouse space, suppliers' capabilities, and, in some cases, money. Comparison to available or demonstrated capacity is usually done for each key resource. This comparison assists the master scheduler in establishing a feasible master production schedule. Three approaches to performing RCCP are the bill of labour (resources, capacity) approach, the capacity planning using overall factors approach, and the resource profile approach.
<b>Routing</b>	Information detailing the method of manufacture of a particular item. It includes the operations to be performed, their sequence, the various work centres involved, and the standards for setup and run. In some companies, the routing also includes information on tooling, operator skill levels, inspection operations, and testing requirements, etc.
<b>Run Time</b>	The time required to process a piece or lot at a specific operation. Run time does not include setup time.
<b>Safety Lead Time</b>	An element of time added to normal lead time to protect against fluctuations in lead time so that an order can be completed before its real need date. When used, the MRP system, in offsetting for lead time, will plan both order release and order completion for earlier dates than it would otherwise.
<b>Safety Stock</b>	In general terms Safety Stock is quantity of stock planned to be available in inventory to protect against fluctuations in demand or supply. In the context of master production scheduling, safety stock may also be the additional inventory and capacity planned as protection against forecast errors and short-term changes in the demand backlog.
<b>Sales and Operations Planning (SOP)</b>	A process that provides management the ability to strategically direct its businesses to achieve competitive advantage on a continuous basis by integrating customer-focused marketing plans for new and existing products with the management of the supply chain. The process brings together all the plans for the business (sales, marketing, development, manufacturing, sourcing, and financial) into one integrated set of plans. It is performed at least once a month and is reviewed by management at an aggregate (product family) level. The process must reconcile all supply, demand, and new-product plans at both the detail and aggregate level and tie to the business plan. It is the definitive statement of the company's plans for the near to intermediate term covering a horizon sufficient to plan for resources and to support the annual business planning process. Executed properly, the sales and operation planning process links the strategic plans for the business with its execution and reviews performance measures for continuous improvement.

<b>Sales Forecast</b>	An attempt, typically by the Sales department to guess the expected demand. Depending on the product this may be done at an item level or family level. In some systems the forecast can be used to generate demand for the MRP/MPS system.
<b>Scheduled Receipt</b>	An open order that has an assigned due date.
<b>Scrap</b>	Material outside of specifications and possessing characteristics that make rework impractical.
<b>Scrap Factor</b>	A percentage factor in the product structure used to increase gross requirements to account for anticipated loss within the manufacture of a particular product.
<b>Serial Number</b>	A unique number assigned for identification to a single piece that will never be repeated for similar pieces. Serial numbers are usually applied by the manufacturer but can be applied at other points, including by the distributor or wholesaler.
<b>Setup</b>	<p>1) The work required to change a specific machine, resource, work centre, or line from making the last good piece of item A to making the first good piece of item B.</p> <p>2) The refitting of equipment to neutralize the effects of the last lot produced (e.g., teardown of the just-completed production and preparation of the equipment for production of the next scheduled item).</p>
<b>Setup Time</b>	The time required for a specific machine, resource, work centre, process, or line to convert from the production of the last good piece of item A to the first good piece of item B.
<b>Shop Order</b>	Manufacturing Order, Production Order or Works Order
<b>Shop Floor Control</b>	A system for using data from the shop floor to maintain and communicate status information on shop orders (manufacturing orders) and on work centres. The major sub-functions of shop floor control are (1) assigning priority of each shop order; (2) maintaining work-in-process quantity information; (3) conveying shop order status information to the office; (4) providing actual output data for capacity control purposes; (5) providing quantity by location by shop order for work-in-process inventory and accounting purposes; and (6) providing measurement of efficiency, utilization, and productivity of the workforce and machines. Shop floor control can use order control or flow control to monitor material movement through the facility.
<b>Shrinkage Factor</b>	A percentage factor used to compensate for the expected loss during the manufacturing cycle of an item. This factor differs from the scrap factor in that it affects all components of the item, where the scrap factor relates to only one component's usage.
<b>Single-level Bill of Material</b>	A display of components that are directly used in a parent item. It shows only the relationships one level down.

<b>Six Sigma</b>	A term used generally to indicate that a process is well controlled, i.e., tolerance limits are $\pm 6$ sigma from the centreline in a control chart. The term is usually associated with Motorola, which named one of its key operational initiatives Six-Sigma Quality.
<b>Standard Cost Accounting</b>	A cost accounting system that uses cost units determined before production for estimating the cost of an order or product. For management control purposes, the standards are compared to actual costs, and variances are computed.
<b>Standard Costs</b>	The target costs of an operation, process, or product including direct material, direct labour, and overhead charges.
<b>Standard Hours</b>	The length of time that should be required to (1) set up a given machine or operation and (2) run one batch or one or more parts, assemblies, or end products through that operation. This time is used in determining machine requirements and labour requirements. Standard time assumes an average worker following prescribed methods and allows time for personal rest to overcome fatigue and unavoidable delays. It is also frequently used as a basis for incentive pay systems and as a basis of allocating overhead in cost accounting systems.
<b>Statistical Process Control (SPC)</b>	The application of statistical techniques to monitor and adjust an operation. Often the term statistical process control is used interchangeably with statistical quality control.
<b>Statistical Quality Control (SQC)</b>	The application of statistical techniques to control quality. Often the term statistical process control is used interchangeably with statistical quality control, although statistical quality control includes acceptance sampling as well as statistical process control.
<b>Stock</b>	1) Items in inventory. 2) Stored products or service parts ready for sale, as distinguished from stores, which are usually components or raw materials.
<b>Stock Keeping Unit (SKU)</b>	An item at a particular geographic location. For example, one product stocked at the plant and at six different distribution centres would represent seven SKUs.
<b>Stock Turns</b>	The number of times that an inventory cycles, or 'turns over' during the year. A frequently used method to compute inventory turnover is to divide the average inventory level into the annual cost of sales. For example, an average inventory of £3 million divided into an annual cost of sales of £21 million means that inventory turned over seven times.
<b>Subassembly</b>	An assembly that is used at the next level of the bill of material to build another assembly.
<b>Subcontracting</b>	Sending production work outside to another manufacturer.

<b>Supply</b>	<p>1) The quantity of goods available for use.</p> <p>2) The actual or planned replenishment of a product or component. The replenishment quantities are created in response to a demand for the product or component or in anticipation of such a demand.</p>
<b>Supplier</b>	<p>1) Provider of goods or services. Vendor</p> <p>2) Seller with whom the buyer does business, as opposed to vendor, which is a generic term referring to all sellers in the marketplace. Vendor</p>
<b>Supply Chain</b>	<p>1) The processes from the initial raw materials to the ultimate consumption of the finished product linking across supplier-user companies. 2) The functions inside and outside a company that enable the value chain to make products and provide services to the customer.</p>
<b>Supply Chain Management (SCM)</b>	The planning, organizing, and controlling of supply chain activities.
<b>Tact Time</b>	The time required between completions of successive units of end product. Tact time is used to pace lines in production environments. Also referred to as Cycle Time.
<b>Theory of Constraints (TOC)</b>	A management philosophy developed by Dr. Eliyahu M. Goldratt that can be viewed as three separate but interrelated areas-logistics, performance measurement, and logical thinking. Logistics include drum-buffer-rope scheduling, buffer management, and VAT analysis. Performance measurement includes throughput, inventory and operating expense, and the five focusing steps. Thinking process tools are important in identifying the root problem (current reality tree), identifying and expanding win-win solutions (evaporating cloud and future reality tree), and developing implementation plans (prerequisite tree and transition tree).
<b>Third Party Logistics Providers (3PL)</b>	A company that manages all or part of another company's product delivery operations.
<b>Time Bucket</b>	A number of days of data summarized into a columnar display. A weekly time bucket would contain all of the relevant data for an entire week. Weekly time buckets are considered to be the largest possible (at least in the near and medium term) to permit effective MRP.
<b>Time Fence</b>	A policy or guideline established to note where various restrictions or changes in operating procedures take place. For example, changes to the master production schedule can be accomplished easily beyond the cumulative lead time, while changes inside the cumulative lead time become increasingly more difficult to a point where changes should be resisted. Time fences can be used to define these points.

<b>Total Quality (TQ) or Total Quality Management (TQM)</b>	A term coined to describe Japanese-style management approaches to quality improvement. Since then, total quality management (TQM) has taken on many meanings. Simply put, TQM is a management approach to long-term success through customer satisfaction. TQM is based on the participation of all members of an organization in improving processes, goods, services, and the culture in which they work. The methods for implementing this approach are found in teachings of such quality leaders as Philip B. Crosby, W. Edwards Deming, Armand V. Feigenbaum, Kaoru Ishikawa, J. M. Juran, and Genichi Taguchi.
<b>Traceability</b>	The attribute allowing the ongoing location of a shipment to be determined. 2) The registering and tracking of parts, processes, and materials used in production, by lot or serial number.
<b>Transit Time</b>	A standard allowance that is assumed on any given order for the movement of items from one operation to the next.
<b>Unit of Measure</b>	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.
<b>User Interface (UI)</b>	The portion of A computer system through which the end user interacts with the system. It may include the keyboard, mouse, touch-screen, and other devices.
<b>Value Stream Mapping (VSM)</b>	A Lean technique used to analyse the flow of materials and information currently required to bring a product or service to a consumer. At Toyota, where the technique originated, it is known as "Material and Information Flow Mapping"
<b>Variance</b>	Typically a figure that is the difference between a standard cost (budgeted) and the actual cost.
<b>Vendor Managed Inventory</b>	A means of optimizing supply chain performance in which the supplier has access to the customer's inventory data and is responsible for maintaining the inventory level required by the customer. This activity is accomplished by a process in which resupply is done by the vendor through regularly scheduled reviews of the on-site inventory. The on-site inventory is counted, damaged or outdated goods are removed, and the inventory is restocked to predefined levels. The vendor obtains a receipt for the restocked inventory and accordingly invoices the customer.
<b>Work Cell</b>	Dissimilar machines grouped together into A production unit to produce A family of parts having similar routings.
<b>Work Centre</b>	A specific production area, consisting of one or more people and/or machines with identical capabilities, that can be considered as one unit for purposes of capacity requirements planning and detailed scheduling.

<b>Work in Progress (WIP)</b>	A good or goods in various stages of completion throughout the plant, including all material from raw material that has been released for initial processing up to completely processed material awaiting final inspection and acceptance as finished goods inventory. Many accounting systems also include the value of semi-finished stock and components in this category.
<b>Works Order</b>	Production Order
<b>Yield</b>	The ratio of usable output from a process to its input to a given work centre.
<b>Zero Defects</b>	A performance standard developed by Philip B Crosby to address a dual attitude in the workplace: people are willing to accept imperfection in some areas, while in others they expect the number of defects to be zero. This dual attitude has developed as a result of the conditioning that people are human and humans make mistakes. However, the zero-defects methodology states that if people commit themselves to watching details and avoiding errors, they can move closer to the goal of zero defects. The performance standard that must be set is "zero defects," anything less should not be acceptable.
<b>5 Ss</b>	The 5's relate to workplace organisation and housekeeping and is based on the Japanese ideas of i) <i>Seir</i> to clear out unwanted material and tools), ii) <i>Seiton</i> to locate materials and tools correct, iii) <i>Seiso</i> to ensure workplace is thoroughly clean, iv) <i>Seiketso</i> to arrange regular clean ups, and v) <i>Shitsuke</i> to maintain and improve the standards established in steps 1-4 to ensure continuity. As such, the 5's are tools used to achieve Lean manufacturing and are commonly applied along side Kaizen, SMED, TPM and JIT.

*About Neustro: Neustro are the business systems experts - design, implement, manage and support IT for business – from e-mail to ERP. From one-off projects to a complete outsourced service. Neustro are specialists in Microsoft Dynamics AX and Infor Baan.*