

The Demand Driven Institute Dictionary

The Demand Driven Institute recognizes the standard APICS definitions for all known and accepted terms in the Demand Driven body of knowledge. This dictionary is intended as a supplementary source for terms that are new in the emerging Demand Driven body of knowledge.



Term	Definition
actively synchronized replenishment (ASR)	The initial name given to DDMRP
Adaptive Enterprise Foundations Professional (AEFP) [™]	Adaptive Enterprise Foundations Professional (AEFP) [™] is a professional endorsement certification offered by the Demand Driven Institute. AEFP [™] demonstrates that an individual understands the conceptual differences between conventional supply chain approaches dominated by MPS, MRP and DRP and the emerging flow-based approaches including the Demand Driven Adaptive Enterprise (DDAE) Model.
Adaptive S&OP	The strategic component of the Demand Driven Adaptive Enterprise (DDAE) Model managing the strategic adaptive cycle.
ADU	Acronym of Average Daily Usage
ADU alert	An alert indicating a significant change in ADU within a defined set of parameters (quantity and time).
ADU alert horizon	A defined shorter rolling range within the broader rolling horizon used to calculate ADU.
ADU alert threshold	A defined level of change in ADU that triggers the alert within the ADU alert horizon.
ADU-based recalculation	A process of dynamically adjusting strategically replenished buffers incorporating a rolling horizon.
AEFP	Acronym of Adaptive Enterprise Foundations Professional
artificial batch	Any batch that is not a function of actual demand.
ASR	Acronym of Actively Synchronized Replenishment
average daily usage (ADU)	Average usage of a part, component, or good on a daily basis.
average inventory range	the red zone plus the green zone quantity from a planning perspective
average on-hand position	the red zone plus half the green zone quantity from a planning perspective
Bimodal inventory	An aggregate inventory view exhibiting a continuous probability distribution with two different modes. These appear as distinct peaks (local maxima) at the same time – one peak depicting inventory shortages and back orders and the other excessive positions and overstocked positions. An individual item bimodal distribution shows the same item over the course of time displaying the two distinct distribution conditions.
blended ADU	ADU calculated based on a combination of history and forecast
buffer penetration	The amount of remaining buffer, typically expressed as a percentage.
buffer profile	A globally managed group of parts with similar lead time, variability, control, and order management characteristics.
buffer run chart	A graphical technique that illustrates how a buffer is performing over time.

buffer status alerts	show the current and projected status of the decoupling point positions across the network of dependencies
buffer zone	A stratification layer within a stock buffer. Typically, buffer zones are color coded with red, yellow, and green assignments.
capacity buffer	A level of capacity that is in excess to immediate, aggregated or expected future demand. Capacity buffers absorb both demand and supply continuity variability. The capacity buffer is monitored over time.
control points	Strategic location in the logical product structure for a product or family that simplify the planning, scheduling and control functions (ref APICS dictionary)
current on-hand alert	An execution alert generated by current on-hand penetration into the red zone of the buffer.
customer tolerance time	The amount of time potential customers are willing to wait for the delivery of a good or a service
DDAE	Acronym of Demand Driven Adaptive Enterprise
DDL [™]	Acronym of Demand Driven Leader Professional [™]
DDMRP	Acronym of Demand Driven Material Requirements Planning
DDOM	Acronym of Demand Driven Operating Model
DDPP	Acronym of Demand Driven Planner Professional [™]
DDS&OP	Acronym of Demand Driven Sales and Operations Planning
DDSCP	Acronym of Demand Driven Supply Chain Professional [™]
decoupled explosion	The cessation of bill of material explosion at any decoupled position.
decoupled lead time	A qualified cumulative lead time defined as the longest unprotected/unbuffered sequence in a bill of material.
demand adjustment factor	The Demand Adjustment Factor (DAF) is a manipulation to the ADU input for a specified time period.
demand driven adaptive enterprise	The Demand Driven Adaptive Enterprise (DDAE) model is a management model enabling enterprises to sense market changes, adapt to complex and volatile environments, and develop market driven innovation strategies. Fundamental principles of flow management are combined with the emerging science of complex adaptive systems (CAS). The DDAE model spans the organization's operational, tactical, and strategic ranges through its three primary components: The Demand Driven Operating Model, Demand Driven Sales & Operations Planning, and Adaptive Sales & Operations Planning. The model utilizes a process of emergence, feedback and selection through adaptive cycles to continuously respond and adapt to the complex, changing, and volatile supply chain circumstances in existence today.
Demand Driven Leader Professional [™]	The Demand Driven Leader Professional (DDL [™]) is a professional endorsement certification offered by the Demand Driven Institute. The DDL [™] demonstrates that an individual can apply the concepts of the Demand Driven Operating Model, analyze and evaluate an environment according to the principles of the Demand Driven Operating Model and the tactical components of Demand Driven S&OP.
demand driven material requirements planning (DDMRP)	A method to model, plan and manage supply chains to protect and promote the flow of relevant information and materials. DDMRP is the supply order generation and management engine of a demand driven operating model.

demand driven operating model (DDOM)	A supply order generation, operational scheduling and execution model utilizing actual demand in combination with strategic decoupling and control points and stock, time and capacity buffers in order to create a predictable and agile system that promotes and protects the flow of relevant information and materials within the operational relevant range. A Demand Driven Operating Model's key parameters are set through the Demand Driven Sales and Operations Planning process to meet the stated business and market objectives while minimizing working capital and expedite related expenses.
Demand Driven Planner Professional™	The Demand Driven Planner Professional (DDPP)™ is a professional endorsement certification offered by the Demand Driven Institute. The DDPP™ is earned by an individual who can apply the demand driven concepts, analyze an environment and evaluate an environment using the Demand Driven Material Requirements Planning (DDMRP) methodology.
demand driven sales and operations planning (DDS&OP)	The tactical component of the Demand Driven Adaptive Enterprise (DDAE) Model managing the tactical adaptive cycle. DDS&OP is a tactical bi-directional integration point in a Demand Driven Adaptive Enterprise between the strategic and operational relevant ranges of decision making. Operating primarily in the tactical relevant range, DDS&OP maintains and updates the parameters of the DDOM based on current and emerging business strategy supplied by Adaptive S&OP and the systematic review of past and projected DDOM performance. DDS&OP evaluates scenarios proposed in the Adaptive S&OP process in order to provide relevant DDOM projections. Additionally, DDS&OP recommends strategic alterations and/or internal innovations to leadership involving DDOM future capability and performance.
Demand Driven Supply Chain Professional™	The Demand Driven Supply Chain Professional (DDSCP) is a fellowship level endorsement from the Demand Driven Institute. The DDSCP has proven the ability to successfully apply Demand Driven concepts and create sustained value for an enterprise through that application.
DLT	Acronym of decoupled lead time
dynamic buffers	Buffer levels that are adjusted either automatically or manually based on changes to key part traits.
execution horizon	The life cycle of orders from the time the order is created and/or released to the time it is closed.
flow index	average order frequency compared across all parts
forward ADU	ADU calculated based on forecast
green zone	The top layer of a replenished and replenished override buffer. If the net flow position is in this zone, then no additional supply is created.
lead time adjustment factor	A multiplicative factor applied to part's lead time.
lead time alert	An alert/warning generated by an LTM part. An alert will be triggered whenever the part enters a different time zone from its buffer. Green is the first alert to be encountered, followed by yellow and then red.
lead time alert zone	The zone associated with the percentage of lead time that provides the definition for lead-time alerts. The LTM alert zone has three equal sections color coded green, yellow, and red.

Lead time factor (LTF)	<p>Coefficients to be applied to the average demand multiplied by the lead time period to calculate the Green and Red Base zones.</p> <p>The LTF value for the calculation of the Red Base zone does not necessarily have to be the same as that used for the calculation of the Green zone.</p>
lead-time-managed (LTM) part	<p>A critical non-stocked part that will have special attention paid to it over its execution horizon. Typically, LTM parts are critical, long-leadtime components that do not have sufficient volume to justify stocking. A portion of the lead time of the part (typically 33 percent) will have a three-zoned warning applied to it. That portion is typically divided into three equal sections.</p>
LTM part	<p>Acronym of Lead-Time-Managed part</p>
market potential lead time	<p>The lead time that will allow an increase in price or the capture of additional business either through existing or new customer channels.</p>
master settings	<p>The Demand Driven Operating Model (DDOM) parameters managed by the Demand Driven Sales & Operations Planning process.</p>
material synchronization alert	<p>An alert generated by the earliest occurrence of a negative on-hand balance (current or projected) within at least one DLT.</p>
matrix bill of material	<p>a chart made up from the bills of material for a number of products in the same or similar families. It is arranged in a matrix with components in columns and parents in rows (or vice versa) so that requirements for common components can be summarized conveniently (ref APICS dictionary)</p>
net flow equation	<p>A planning calculation to determine the planning status of a buffered item. The equation is on-hand + on-order (also referred to as open supply) – unfulfilled qualified actual demand. Previously known as the "available stock equation".</p>
net flow position	<p>The position yielded by the net flow equation against a part's buffer values. Previously known as "available stock position".</p>
nonbuffered part	<p>All parts that are not stocked.</p>
occurrence-based recalculation	<p>A method to adjust buffers based on the number and severity of specific occurrences in predefined fixed interval.</p>
on-hand alert level	<p>The percentage of the red zone used by buffer status alerts in order to determine a yellow or red color designation.</p>
operational relevant range	<p>The time frame in which assumptions are valid for the immediate operating environment in a Demand Driven Operating Model (DDOM). The operational relevant range is defined as a part's decoupled lead time.</p>
order spike horizon	<p>A defined future time frame used to qualify order spikes in combination with an order spike threshold. Typically, order spike horizon is set to one DLT.</p>
order spike threshold	<p>A defined amount used to qualify order spikes in combinations with an order spike horizon. Typically, the order spike threshold will be expressed as a percentage of the total red zone (or min value) of a part's buffer.</p>
OTOG	<p>Acronym for Over Top of Green</p>

over top of green (OTOG)	A situation in which either available stock or on-hand stock is over the top of defined green zone, indicating an excessive inventory position.
PAF	acronym for Planned Adjustment Factor
past ADU	ADU calculated based on history
planned adjustment factor	Buffer manipulations based on certain strategic, historical, and business intelligence factors.
planned adjustments	Manipulations to the buffer equation that affect inventory positions by raising or lowering buffer levels and their corresponding zones at certain points in time. Planned adjustments are often based on certain strategic, historical, and business intelligence factors.
Prioritized share	An allocation schema utilizing the net flow positions of a group of parts in order to accommodate a specific limitation or requirement.
projected on-hand alert	An alert generated by a projected on-hand positions considering a part's DLT based on on-hand, open supply, and either actual demand or ADU.
qualified actual demand	The demand portion of the available stock equation comprised of qualified order spikes, past-due demand, and demand due today.
qualified order spike	A quantity of combined daily actual demand within the order spike horizon and over the order spike threshold.
ramp-down adjustment	Manipulations to the buffer equation that affect inventory positions, lowering buffer levels and their corresponding zones at certain points in time. Ramp-down adjustments typically are used in part deletion.
ramp-up adjustment	Manipulations to the buffer equation that affect inventory positions, raising buffer levels and their corresponding zones at certain points in time. Ramp-up adjustments typically are used for part introduction.
red zone	The lowest-level zone in a replenished and replenished override part buffer. The zone is color-coded red to connote a serious situation. The red zone is the summation of red zone safety and red zone base.
red zone base	The portion of the red zone sized by lead-time factors.
red zone safety	The portion of the red zone sized by variability factors.
relative priority	The priority between orders filtering by zone color (general reference) and buffer penetration (discrete reference).
replenished override part	A strategically determined and positioned part using a static (buffer zones are manually defined) three-zoned buffer for planning and execution. Planned adjustments, however, can be used with these buffers.
replenished part	A strategically determined and managed part using a dynamic three-zoned buffer for planning and execution. Buffer zones are calculated using buffer profiles and specific part attributes such as ADU and DLT.
sales order visibility horizon	The time frame in which a company typically becomes aware of sales orders or actual dependent demand.
seasonality adjustment	Manipulations to the buffer equation that affect inventory positions by adjusting buffers to follow seasonal patterns.
significant minimum order quantity	A minimum order quantity that sets the green zone of a buffer.

Spike	The comparatively large upward or downward movement of a value level in a short period.
stock out (SO)	An item that is not immediately available in stock (ref APICS dictionary)
stock out with demand (SOWD)	An item that is not immediately available in stock and has a requirement
Stock out with Demand Alert	A notification of a strategically stocked item indicating a lack of inventory on hand and a presence of a requirement
strategic adaptive cycle	The enterprise's evolutionary loop in the strategic relevant range as defined by a process of emergence, feedback and selection where emergence is a reconfiguration of the system triggered externally or internally, feedback is a set of defined signals and triggers that are monitored by adaptive agents and selection is decisions, actions, and learning in response to the signals and triggers which may or may not result in another reconfiguration at the strategic level.
strategic inventory positioning	The process of determining where to put inventory that will best protect the system against various forms of variability to best meet market needs and leverage working capital.
strategic relevant range	The time frame in which assumptions are valid for longer range planning and decision making and the Demand Driven Adaptive Enterprise (DDAE) framework. The strategic relevant range is typically defined as beyond the cumulative lead time of the environment as necessary to make capacity and infrastructure decisions.
supply offset	Adjusting the timing of the application of a demand adjustment factor to account for long lead time components.
synchronization alerts	Alerts designed to highlight problems regarding dependencies.
tactical adaptive cycle	The enterprise's evolutionary loop in the tactical relevant range as defined by a process of emergence, feedback and selection where emergence is a reconfiguration of the system triggered externally or internally, feedback is a set of defined signals and triggers that are monitored by adaptive agents and selection is decisions, actions, and learning in response to the signals and triggers which may or may not result in another reconfiguration at the tactical level.
tactical relevant range	The time frame in which assumptions are valid for the near-term range; past, present and short-range future for the operation and adaptation of the Demand Driven Operating Model (DDOM). The tactical relevant range is typically defined as one cumulative lead time in the past to one cumulative lead time in the future.
thoughtware	The analysis and process employed to define the relevant factors and dependencies in an organization or system to construct appropriate business rules and operating strategies that maximize velocity, visibility, and equity. Within the DDMRP framework, thoughtware is commonly referred to regarding applying the inventory positioning factors.
TOG	Acronym of Top Of Green
top of green (TOG)	The quantity of the top level of the green zone. TOG is calculated by the sum of red, yellow, and green zones.

top of red (TOR)	The quantity of the top level of the red zone.
top of yellow (TOY)	The quantity of the top level of the yellow zone. TOY is calculated by the sum of the red and yellow zones.
TOR	Acronym of Top Of Red
TOY	Acronym of Top Of Yellow
Variability Factor (VF)	Coefficient to be applied to the red zone base to calculate the red zone safety zone.
yellow zone	The middle layer of the buffer level coded with yellow to convey a sense of warning. The yellow zone is the rebuild zone for replenished and replenished override buffers.
zone adjustment factor	Adjusting part buffer zones by applying a multiplicative factor to the value of the zone.