Glossary of Terms and Abbreviations

Abbreviations

A/F. Actual-to-forecast ratio. This is the ratio of the actual orders received to the forecasted orders. Normally expressed as a percentage. A/F greater than 100% implies that actual orders came in higher than forecasts, that is, forecasts were low or demand was high. A/F less than 100% implies that actual orders came in lower than forecasts, that is, forecasts were high or demand was low.

BOM. Bill of materials. A description of the components that go into an assembly and their respective quantities.

- Single-level BOM. The components are raw materials fabricated or manufactured elsewhere (i.e., purchased parts).
- Multiple-level BOM. The components are other assemblies and purchased parts.

EOL. End of life (end of product life cycle).

FGI. Finished goods inventory.

RPI. Raw parts inventory. Raw material in stores waiting to be processed.

WIP. Work in process. Raw material on the production line being assembled into the final product.

PCFT. Production cost flowthrough. Dollar value of production passing through the manufacturing enterprise. Because of the assumptions underlying the Simple Model, in this paper PCFT is synonymous with shipments from the manufacturing enterprise.

Terms

Backlog. Products ordered by customers but not yet shipped.

Build Time. The time required for completion of the product when all the parts are available.

Committed Inventory. The total inventory to which the manufacturing enterprise is currently committed. It is the sum of the on-order material and the on-hand inventory.

Consignment Inventory. Inventory in the sales offices and for demonstration purposes.

End-of-Life Inventory. The amount of inventory left over at the end of the product life cycle, that is, when no more orders are backlogged or outstanding for the product. EOL inventory includes leftover unused RPI, unshipped units in FGI, and consignment inventory. In general, material and products left over at the end of the product life cycle are not useful for anything else and must be written off.

Forecast Quality. Qualitative description of the amount of deviation of actual customer orders from forecasted orders. The ratio A/F described above is one way to quantify forecast quality. Forecast quality is best for A/F = 100%, and gets worse as A/F moves away from 100%.

Lead Time. The time between placement of an order to the vendors and receipt of the material.

On-Hand Inventory. All physical inventory that is owned by the enterprise. It is the sum of RPI, WIP, and FGI.

On-Order Inventory. Same as on-order material.

On-Order Material. The total amount of material for which orders are currently open and which will eventually be received from vendors. It increases each time a new order is issued and sent to the vendor, and decreases each time a shipment of parts is received from the vendor.

On-Time Delivery. Measures whether the order is delivered to the customer within the quoted availability. When described in units or dollars, it represents the units or dollar value of the deliveries that are delivered within the quoted delivery time. When described as a percentage it represents the percentage of on-time deliveries with respect to the total deliveries.

On-Time Shipments. Products that were shipped to customers within the quoted availability minus the transit time, that is, those shipped to arrive in time to satisfy the quoted availability.

Order Backlog. The total amount of outstanding orders from customers that have not yet been shipped. It increases each time a new order is received from customers, and decreases each time an order is shipped to customers.

Order-to-Delivery Time. The time period from order issue to order delivery at the customer site.

Order-to-Ship Time. Time period from order receipt to order shipment at the manufacturing enterprise.

Orders Delivered. Orders that have been delivered to customers.

Orders Shipped. Orders that have been shipped to customers.

Product Life Cycle. The general shape of the increase, leveling off, and decrease in order volume for the product. We assume here it is trapezoidal.

S and S-Plus. S is a language and interactive programming environment for data analysis and graphics developed at AT&T Bell Laboratories. S-Plus is a product version of S that is sold and supported by Statistical Sciences, Inc.