THE ULTIMATE DEMAND PLANNER DICTIONARY

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DEMAND PLANNERS

Demand planning is an integral part of supply chain management. In short, this process is responsible for using analytical tools to predict consumer demand for products. A demand planner strives to find the perfect balance between having enough product to meet consumer demands without having an excess that eats into the company's bottom line.

Many factors, including labor, changes in the economy, natural disasters, and global events can have an impact on demand. The importance of a demand planner cannot be underestimated. We have compiled terms that a demand planner should be familiar with.

Demand Planner Dictionary

A

ABC Classification

The classification of a group of items in decreasing order of annual dollar volume (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 percent to 20 percent by number of items and 50 percent to 70 percent by projected dollar volume. The next grouping, B, usually represents about 20 percent of the items and about 20 percent of the dollar volume. The C class contains 60 percent to 70 percent of the items and represents about 10 percent to 30 percent of the dollar volume. The ABC principle states that effort and money can be saved through applying looser controls to the low dollar-volume class items than to the high-dollar volume class items. The ABC principle is applicable to inventories, purchasing, and sales.

Abnormal Demand

Demand in any period that is outside the limits established by management policy. This demand may come from a new customer or from existing customers whose own demand is increasing or decreasing. Care must be taken in evaluating the nature of the demand: Is it a volume change? Is it a change in product mix? Is it related to the timing of the order?

Aggregated Forecast

An estimate of sales, often time-phased, for a grouping of products or product families produced by a facility or firm. Stated in terms of units, dollars, or both, the aggregate forecast is used for sales and production planning (or for sales and operations planning) purposes.

Artificial Intelligence

Artificial intelligence is when a computer or machine has human-like intelligence characteristics. These machines have the ability to 'learn' over time based on patterns. This technology can complete tasks much quicker than humans could ever dream of and with much fewer errors. Artificial intelligence can carry processes such as forecasting, data collection, report generation,

and much more. All these capabilities are extremely beneficial to demand planners.

Assortment Forecasting — A warehousing technique that stores the goods close to the customer to ensure short customer lead times

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B

B2B — Abbreviation for business-to-business commerce.

B2C — Abbreviation for business-to-consumer sales.

Best Practice — 1) A method or technique that consistently shows results superior to those achieved through other means, often used as a benchmark. Best practices can be defined within an organization, within an industry, or across industries. 2) Practices that have had a proven and positive impact on organizational or supply chain performance. They are categorized as follows: Current-Not emerging, not obsolete; Structured Feature a clearly stated goal, scope, process, and procedure; Proven-Demonstrated in a working environment and linked to key metrics; Repeatable Proven in multiple organizations and industries.

Bill of Material (BOM) — 1) 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. A variety of display formats exists for bills of material, including the single-level bill of material, indented bill of material, modular (planning) bill of material, transient bill of material, matrix bill of material, and costed bill of material. 2) A list of all the materials needed by a contract manufacturer to make one production run of a product's piece parts/ components for its

customers. The bill of material may also be called the formula, recipe, or ingredients list in certain process industries.

Bottom-up Planning

Planning for resource requirements by starting at the bottom of the bill of material or services, estimating the resources required to produce each product or service, and then adding the resources up.

Budget

A company's budget is based on predicted revenue and expenses over a particular time. Budgets can change from time-to-time. They give demand planners an idea of how much money is allotted for revenue.

C

Cloud

This is software that is designed to run on the internet and therefore can be accessed remotely.

Coefficient of Variation

In statistics, the ratio of the standard deviation to the mean for a particular process.

CPFR

Abbreviation for collaborative planning, forecasting, and replenishment

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D

Decomposition

A method of forecasting where time series data is separated into up to three components—trend, seasonal, and cyclical—where trend includes the general horizontal upward or downward movement over time; seasonal includes a recurring demand pattern such as day of the week, weekly, monthly, or quarterly; and cyclical includes any repeating, nonseasonal pattern. A fourth component is random—that is, data with no pattern. The new forecast is made by projecting the patterns individually determined and then combining them.

Demand

A need for a particular product or component. The demand could come from any number of sources (e.g., a customer order or forecast, an interplant requirement, a branch

warehouse request for a service part, or the manufacturing of another product). At the finished goods level, demand data is usually different from sales data because demand does not necessarily result in sales (i.e., if there is no stock, there will be no sale). There are generally up to four components of demand: cyclical component, random component, seasonal component, and trend component.

Demand Management

1) The function of recognizing all demands for goods and services to support the marketplace. It involves prioritizing demand when supply is lacking. Proper demand management facilitates the planning and use of resources for profitable business results. 2) In marketing, the process of planning, executing, controlling, and monitoring the design, pricing, promotion, and distribution of products and services to bring about transactions that meet organizational and individual needs.

Demand Planning

The process of combining statistical forecasting techniques and judgment to construct demand estimates for products or services (both high and low volume; lumpy and continuous) across the supply chain from the suppliers' raw materials to the consumer's needs. Items can be aggregated by product family, geographical location, product life cycle, and so forth, to determine an estimate of consumer demand for finished products, service parts, and services. Numerous forecasting models are tested and combined with judgment from marketing, sales, distributors, warehousing, service parts, and other functions. Actual sales are compared to forecasts provided by various models and judgments to determine the best integration of techniques and judgment to minimize forecast error.

Demand Shaping

The practice of using the four Ps (product, pricing, placement, and promotion) and other market variables to influence the

demand of a product or service so that demand better matches available supply.

Demand Uncertainly

The uncertainty or variability in demand as measured by the standard deviation, mean absolute deviation (MAD), or variance of forecast errors.

Dependent Demand

Demand that is directly related to or derived from the bill-of-material structure for other items or end products. 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.

E

Exception Management

The practice of responding only to issues or events that fall outside a predetermined threshold. Managers are prompted to respond to these critical matters first. This practice is often applied to management of budgets, projects, and risks. Sometimes referred to as management by exception.

Exclusions

Exclusions refer to pieces of data that are intentionally left out of reports and analysis. This is often because the data has been deemed inaccurate or irrelevant and therefore the omission prevents inaccurate reports.

Exponential smoothing forecast

A type of weighted moving average forecasting technique in which past observations are geometrically discounted according to their age. The heaviest weight is assigned to the most recent data. The smoothing is termed exponential because data points are weighted in accordance with an exponential function of their age. The technique makes use of a smoothing constant to apply to the difference between the most recent forecast and the critical sales data, thus avoiding the necessity of carrying historical sales data. The approach can be used for data that exhibits no trend or seasonal

patterns. Higher order exponential smoothing models can be used for data with either (or both) trend and seasonality.

F

Forecast

An estimate of future demand. A forecast can be constructed using quantitative methods, qualitative methods, or a combination of methods, and it can be based on extrinsic (external) or intrinsic (internal) factors. Various forecasting techniques attempt to predict one or more of the four components of demand: cyclical, random, seasonal, and trend. Syn: sales forecast. See: Box-Jenkins model, exponential smoothing forecast, extrinsic forecasting method, intrinsic forecasting method, moving average forecast, qualitative forecasting method, quantitative forecasting method.

Forecast Accuracy

A measurement of how exact a forecast is, often defined as 1-MAPE (Mean Absolute Percentage Error).

Forecast Consumption

The process of reducing the forecast by customer orders or other types of actual demands as they are received. The adjustments yield the value of the remaining forecast for each period.

G

Goodness of fit

The degree to which a model complies with observed data.

I

Independent Demand

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.

Inventory Flow

Inventory flow is the process by which products travel through a company. This process begins with the supplier and ends with consumer purchases. Demand planners use inventory flow to help in managing inventory.

Inventory Positioning

Inventory positioning is the location of products from a product line. Are they in the plant, or a regional or field warehouse?

Inventory Visibility

This term refers to knowing what products you have on hand and where those products are at any given moment.

M

Market Share

Market share refers to the part of the market that a particular product or company has control over.

Mean absolute percent error (MAPE)

A measure of statistical variation in a forecast. Computed by dividing each absolute forecast error by the actual demand, multiplying that by 100 to get the absolute percentage error, and computing the average.

O

On-Premises Software

This is software that is designed to run on the grounds of the organization, but not remotely.

Outliers

These are data points that fall outside of the norm. On a graph, these are points that are a significant distance away from the other points on the graph. Outliers can be a result of a valid piece of data that happened to fall out of the norm, or it could be due to an error. Outliers determined to be due to errors are omitted from the results.

P

Platform Agnostic

This term refers to a platform that is free from any ties to a specific system. This means users can access it from anywhere at any time.

Point of Sale Data

This is consumer data that is obtained once a purchase or transaction has been made. Information collected includes consumer information, payment methods, and products bought. An order history can be started for consumers who make multiple purchases. Demand planners can then use this information to

help forecast which products are most likely to be purchased in the future and in what quantity.

Product Line

This is a group of products that are sold by the same company. These products are related to each other in some way and are marketed under the same brand.

Product Lining

Product lining is when companies offer multiple products that are related for sale as individual products. Let's say a cosmetic company sells a product line that consists of lipstick, a mascara, and a foundation. Product lining means that customers can purchase each product separately without having to purchase the other two.

Product Portfolio Management

This is the crucial process of managing the product's lifecycle. The process starts when a product is first introduced and carries through to when a product is discontinued.

Product Mix

The product mix also goes by the name product assortment. This number represents the number of product lines that a company carries. A company may only carry one product line, or it may carry hundreds or even thousands.

R

Replenishment Cycle

The replenishment cycle is the process in which inventory is resupplied. Demand planning requires implementing an efficient replenishment cycle to ensure that inventory is where you need it when you need it.

Risk Assessment

Risk assessment is the process of gathering information to identify potential factors that may have a negative impact on demand for your company's products. This is useful information for demand planners when deciding how much inventory to order.

S

S&OP

Abbreviation for sales and operations planning.

SIPOC

Acronym for “supplier, input, process, output, customer”

Seasonal Index

–1) A number used to adjust data to seasonal demand. 2) Manipulations to the buffer size that affect inventory positions by adjusting buffers to follow seasonal patterns. Syn: seasonal adjustment.

Seasonality

A predictable repetitive pattern of demand measured within a year where demand grows and declines. These are calendar-related patterns that can appear annually, quarterly, monthly, weekly, daily and/or hourly.

Standard deviation

A measurement of dispersion of data or of a variable. The standard deviation is computed by finding the differences between the average and actual observations, squaring each difference, adding the squared differences, dividing by n – 1 (for a sample), and taking the square root of the result.

Statistical Algorithms

Statistical algorithms are models that are meant to provide companies with mathematical answers to their questions. Algorithms are used in a multitude of business operation scenarios including marketing, sales, and demand planning.

Statistical Forecasting

This refers to using historical data trends to predict what may happen in the future. This is especially useful in the supply chain because it can help demand planners forecast what the demand will be for products so that they can order accordingly. Accurately ordering products is crucial when it comes to preventing loss of revenue to overordering or loss of sales due to product shortage.

Supply Chain

The supply chain is an intricate network of information, companies, resources, people, and processes. All these components work together to produce products and bring these products to consumers.

Supply Chain Forecasts

Like statistical forecasting, supply chain forecasts are a prediction as to what future trends may be. This forecast looks at data pertaining to your suppliers. It is used to determine whether each supplier offers completed parts or if they must be assembled at a different point in the manufacturing process. This is important for understanding when suppliers will have products available and the quantity.

T

Time series

A set of data that is distributed over time, such as demand data in monthly time periods. Various patterns of demand—seasonal, trend, cyclical, and random—must be considered in time series analysis

Time series forecasting

A forecasting method that projects historical data patterns into the future. Involves the assumption that the near-term future will be like the recent past.

Trade Promotion

Trade promotion is a marketing strategy that uses special displays, pricing, demonstrations, and small gifts to generate an increase in demand for a particular product. Companies typically rotate which products that trade promotions are offered on.

Tribal Knowledge

This is information that is well-known within a company or a department but isn't known to the outside world.

Intelligent Demand Planning

An effective supply chain is impossible without intelligent demand planning. Demand planners must collect a large amount of information from various places to make informed decisions to ensure that product inventory matches the predicted demand for those products. Demand planners play a crucial part in a company's bottom line.

Our technologies give your demand planners the information they need when they need it so that they have a comprehensive view of your company's supply chain. Is your demand planning as streamlined and effective as it can be? Contact us today to take your demand planning to the next level.