Click here for Audio

SIX BASIC FORECASTING FORMULAS :
Nos. 4 to 6 – FOR SEASONAL ITEMS

Last time, we examined the three best forecasting algorithms for regular items. This time, let's look at the best forecasting formulas for seasonal items.

---

4. For **ITEMS WITH STRONG SEASONALITY**

The sales for the item will follow the average change in actual sales for all the items.

F = Forecast for the item over the next quarter

Q4 = Actual Sales over the next 3 months of last year° (example :100)
° the fourth quarter in the past counting backwards from now

B = growth factor, positive or negative (example : +5%)

F = Q4 x B ; **F = 100 x 0.05 = 105** for the next quarter

This formula ignores interference from sales outside of the season and focuses on the beginning of the high season.

---

5. For **ITEMS WITH STRONG SEASONALITY AT THE END OF THE SEASON**

The sales for the item will be the same as the actual sales for the corresponding period of last year.

F = Forecast for the item over the next quarter

Q4 = Actual Sales over the next 3 months of last year° (example : 100)
° the fourth quarter in the past counting backwards from now

F = Q4 ; **F = 100** for the next quarter

This formula helps to end a season without overstock and without stockouts.

6. For **DYING ITEMS**

Sales for the item over the next quarter will be equal to actual sales for last month.

    F = Forecast for the item over the next quarter

    M1 = Actual Sales over the last month (example : 100)

    F = M1 = 100, that is, 33 per month if the monthly spread is equal

This formula catches items which die suddenly.

<div align="center">*   *   *   *   *</div>

    The usefulness of a forecasting formula depends on its accuracy, which therefore must be measured. The two books recommended below both contain practical forecast accuracy measures, as well as discussions on the meaning of forecast accuracy.

    Remember that all six basic formulas, and other formulas, evaluate ***together*** the demand history of the item. The software chooses the formula which would have worked the best in the recent past to make the forecast.   It's the idea of "demonstrated sales", not unlike the concept of "demonstrated capacity".
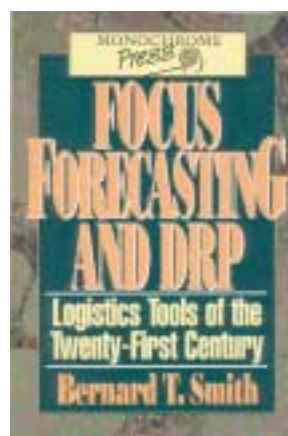
    In a future Technical Newsletter, we'll return to the subjects of Letters No. 17 (« Logistic Forecasts and Marketing Forecasts ») and 25 (« Inventory Policies for the Supply Chain »), to place the detailed formulas that we've presented this summer, in the larger context of Lean Supply Chain Management.

<div align="center">*   *   *   *   *</div>

    If you wish to continue the study of forecasts, here are two excellent books :
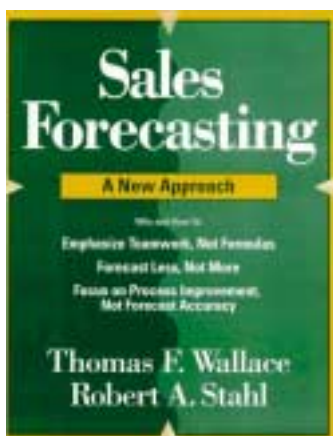
www.tfwallace.com

www.focusforecasting.com