



Become Demand Driven
Supply Chain Management
612.202.0799 BecomeDemandDriven.com

Supply Chain Forecast Accuracy; Is the Inaccuracy Driving You Nuts?

Measuring
forecast
accuracy.
What's the use?

Let's start with one simple fact.
A forecast has two main uses.

1. To gauge the general trends of sales, income, growth, seasonality, Capital Expenditure timing, income/expense timing, resource or staffing expansion requirements, and similar. For this use, precision is not required. Reasonable accuracy is enough. And only significant updates or changes can be impactful to varying degrees.

2. To determine the quantity and timing of component order placement. For this use, absolute precision is expected because the traditional tools we are using demand it. And, with every update or adjustment, every other related decision also must change, resulting in endless circles of disruption.

Here are the elements to consider.

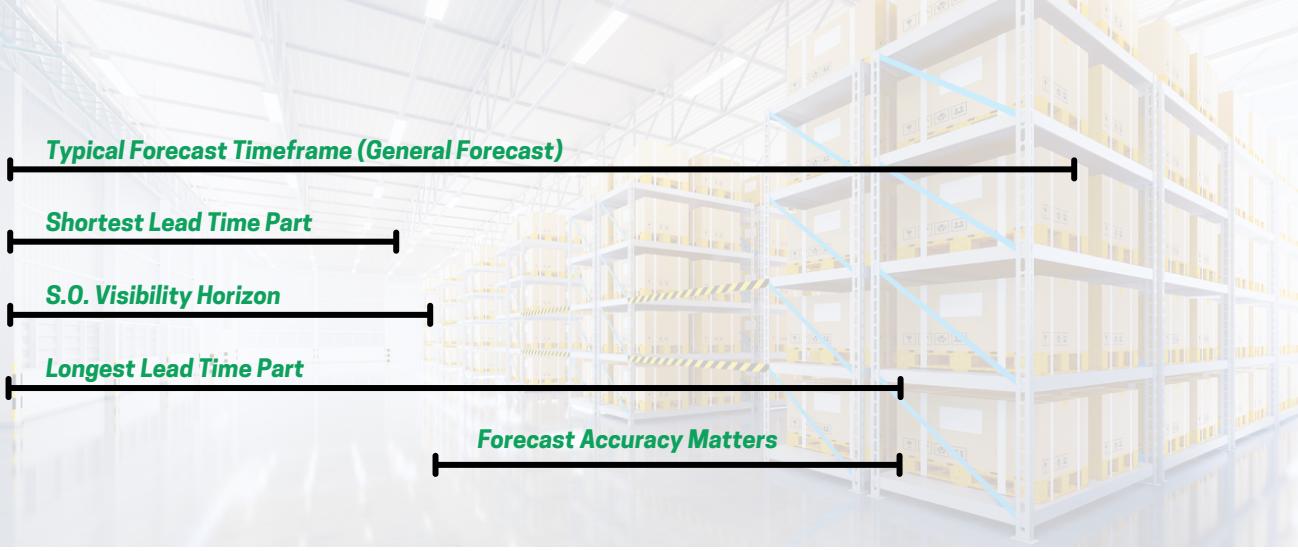
- 1. Component Lead Time** (longest, shortest, and everything in between).
- 2. Sales Order Visibility Horizon** – Time between Sales Order and Due Date (typically).
- 3. Quantity and Timing** of the Order vs the Quantity and Timing of the Forecast.

Components whose lead time falls within the sales order visibility horizon do not require forecasts. At least, not for creation of the component purchase order.

The long lead time component (8 months before the order due date) not surprisingly, requires forecast accuracy at 8 months prior to the order due date. If an order must be placed in February to ensure component availability in October, then in February our October forecast must be accurate. Sound fair?

Components with lead times of 3 months, require the forecast be accurate at 3 months prior to the order due date. And so on.

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In this way, we can see that the component lead time is the key to knowing the required forecast accuracy measurement timeframe.

Short lead time components do not need a forecast for order placement, since the sales order is known before the component order must be placed. But the rest of the components determine the required forecast accuracy timeframe by using their own lead time.

Now, what are the implications of this revelation (if it is indeed a revelation)?

We can get very precise. If we have a component with a 62-day lead time, then we can calculate our forecast accuracy at 62 days and use that accuracy (or inaccuracy) in our calculation of how much to order and when to place the order. Finally, a use for the technological wonders that we've been creating.

But wait. Do we forecast the daily numbers? We might forecast weekly, but most forecasts that are 3 months into the future or more are based on a monthly forecast.

Once again, we're using a precision-based tool to order our components, but the information we are using to make the determination is one (approximate) number spread over 30 days (at best).

Why do we insist on trying to apply something like Artificial Intelligence to this situation? If I insisted that the Demand Planner should tell me the precise daily sales number for 6 months or more into the future, I don't think I'd get an agreement. But the Supply Planner is expected to take an imprecise guesstimate and create the supply plan that will miraculously line up with the exact resulting customer orders.

Imagine I told you that you needed to process a "check request" today so that the money would be received by the vendor on time. But I couldn't tell you the exact amount. And I wasn't even sure which vendor. Sounds ridiculous. Maybe even preposterous.

But this isn't us vs them. It's my attempt to show that something is wrong at the core and we need to return to the basics to understand how to fix it.

Running the wrong way faster will seldom get you to your intended destination. Let's talk about changing the direction.



JOHN MELBYE, DDPP, DDLP, CSCP

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 Stop Managing Chaos, Start Driving Change