Appendix 7 The Missing Links by Caroline Mondon (Industrial Press, 2016) www.themissinglinks.info

Forecasting, Consensus Demand Management and DDMRP

Forecasting and consensus demand management is an incredibly important function and process in any business. In the past, using traditional legacy planning and control systems, it was the key driver of the operational planning even though forecasting accuracy at SKU level was generally less than 70%, at best.

With companies moving to the more flow based Demand Driven Materials Requirements Planning (DDMRP) and execution methodology, driven by actual demand, there is a thought that forecasting is obsolete and no longer required. This cannot be further from the truth. In fact, forecasting and demand management process should always be in a state of continuous improvement due to the changing environment in which we trade.

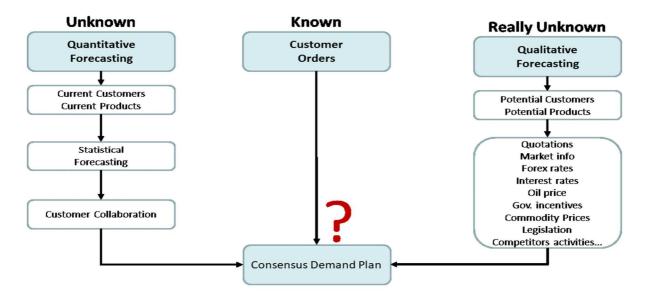
Although forecasting and demand management is not now the key driver of a business's operational planning range, hourly/daily/weekly, it is still highly relevant in the tactical and strategic ranges of the business, which focuses on monthly, quarterly and annual time frames. A company still needs to have a reasonable idea of the future to plan for resources that take a long time to acquire such as working capital, plant/equipment, warehouse space and educated/trained human resources.

Forecasting does have some uses in a DDMRP operating model. If you have products that have high seasonality, the seasonal indexes from a good statistical forecast program can be used as Demand Adjustment Factors (DAF) in your DDMRP system to assist in increasing and decreasing the size of the buffers where the growth in seasonal demand is faster than the buffers can adjust automatically. In addition, forecasts can be used in a DDMRP operating model for the calculation of forward looking or blended (forward/past) Average Daily Usage (ADU) calculations. We just don't use the forecasts to determine what to buy or make in the short term, this is handled by using the Net Flow calculation to generate recommend supply orders.

So, don't abandon your demand management process, instead enhance and improve it. The correct term should be consensus demand management, with 'consensus' being the operative word. A demand plan should never be the thoughts of one person, group or department, but a consensus of a team of people in the organisation that understand how external factors have an impact on the business's demand, either positively or negatively. In some cases, you might want to include an external consultant in this team that has specific knowledge of the markets in which you trade.

A consensus demand plan, which is a prediction of future demand on the business, is made up of three components; the Known, the Unknown and the 'Really' Unknown. Let's look at these in more detail.

The Known – this is actual orders or demand. In this case there is no prediction, we know exactly what the customer wants, the quantity and the delivery date. Unfortunately, most companies only have visibility of this demand over the next few days or a few weeks at most. However, it is demand and needs to be included in the Consensus Demand Plan.



The Unknown – this is typically where we take the sales history of current customers and products and using a quantitative statistical forecasting software package project the historical pattern into the future. Forecast should be built up from the detailed SKU level and aggregated to higher levels of hierarchy as required. Two points here should be considered.

First, one should be forecasting on Demand History and not Sales History. For various reasons, these can be different. So, take your sale history and 'massage' it into a demand history where you know numbers should differ, then use this demand history file to drive your statistical forecasting process.

Secondly, because of the volatile, uncertain, complex and ambiguous (VUCA) world in which we live, the past is not necessarily a predictor of the future. Hence, collaboration and adjustment of the statistical forecasts is required to apply any knowledge about the future about which your statistical forecasting system is unaware.

The 'Really' Unknown – this is the most difficult, but probably the most important, part of your Consensus Demand Management process. Here we tend to use qualitative techniques to see if the numbers look reasonable based on the bigger picture. We need to consider things such as new products and customers, the state of the economy, competition, Forex rates, commodity prices and anything else that has an impact on the demand on your business. These factors will be different for every business in different parts of the world, but need to be considered in the overall consensus demand plan.

When all three of these components are combined, we have a Consensus Demand Plan that can now be aggregated up to necessary levels for Demand Driven Sales and Operations Planning (DDS&OP) and for Strategic Planning processes.

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