

Where to position THE FORECAST-ing function ?

THE CEO HAS NO CLUE !

A CEO had posted above statement on a group discussion.

Within his own organization different stakeholders claimed responsibility for THE FORECAST; but all of them came up with different sets of numbers and trends. Moreover, all these self-proclaimed stakeholders presented seemingly valid reasons why they should be the owner of THE FORECAST.

The CEO had also experienced that these different forecasts had lead to a number of cost- and service-related issues, such as :

- High obsolete stock, resulting into scrap cost
- A lot of slow moving items, resulting into high capital employed
- Real sales orders missed due to lack of inventory
- Rush orders throughout the organization, resulting into extra cost (express transport, extra administration, overtime ...)
- Rush orders frequently leading to last-minute changes in production planning, with consequent loss of efficiency and, once again, extra cost
- Customer dissatisfaction due to unavailability of products
- Supplier dissatisfaction due to last-minute changes in Purchase Orders
- Stressed staff as it is felt like firefighting all the time

And all this due to the fact that there was no internal consensus on THE FORECAST.

So, who should be the proclaimed owner of THE FORECAST ?

The CEO had no clue.

Does this sound familiar to you ?

If so, please continue reading and you will understand why THE FORECAST is a problem and get acquainted to an approach that may help you solve this issue.

DIFFERENT STAKEHOLDERS WITH DIFFERENT TARGETS

As mentioned before, there are different stakeholders claiming responsibility over THE FORECAST and all for valid reasons. These stakeholders have positions throughout the organization and have different targets, different visions and different responsibilities.

The basic stakeholders are: MARKETING, SALES, FINANCE, DISTRIBUTION NETWORK, PRODUCTION and SUPPLY CHAIN.

- **Why MARKETING?**

MARKETING claims responsibility over THE FORECAST as they are in charge over the life cycle of a product or product line (as of here, the term 'product' will cover both a single product as well as a complete product line).

Through market research and in coordination with other departments like Sales, R&D and Pricing, they will estimate the potential market as well as the probable market share over the coming years.

In most cases, they will focus on strengths of new products and opportunities, and less on upcoming threats (they might ignore, that competition is doing similar activities). Also, most companies will use THE FORECAST by Marketing to justify or cancel projects of new products. In this case, they might tend to overestimate THE FORECAST, in order to get higher opportunities of new product development going on; they tend to have lesser focus on products which are in maturity of phase-out stage.

- **Why SALES?**

Since SALES are in daily direct contact with their customers, they should know best what customers want. In addition they estimate sales figures and consequently they claim responsibility over THE FORECAST. Also, in most organizations sales figures are the lead to define Net Sales part of the yearly budget; **the** most important set of financial figures for the coming year. As 'over budgeting' (or defining a budget which later will not be realized) might raise a lot of questions and negative remarks, SALES will most likely take a defensive approach in defining THE FORECAST. Moreover, meeting or even better, beating the budget is routinely rewarded by personal bonuses ... Getting a **lower** budget approved, will result into a **higher** personal incentive...

- **Why FINANCE?**

FINANCE claims responsibility over THE FORECAST as they consider themselves to be a neutral player in the process. As final owner of the budget, they also claim their input in the 'Net Sales' FORECAST.

They might find Marketing biased by their drive to get approval for new products or Sales biased by their eager for higher incentives through lower budgeted Net Sales. The problem here is, that most of the time Finance is too far away from market and customers and has insufficient feeling about the product itself.

Finance is analyzing figures; they know the exact cost of the product and as a result the margins ... Finance might come in arguing about sales prices based on actual costs, neglecting input from what the customer might be willing to pay for it.

- **Why DISTRIBUTION NETWORK?**

The DISTRIBUTION NETWORK plays a different role in this process. Whether the company has a single central warehouse or a (complex) network of points of sale, the Distribution Network will require THE FORECAST to have:

sufficient inventory of - the right product at - the right place at - the right time.

The first important factor here will be time. The Distribution Network should guarantee product availability at the moment required.

A new product launch is an evident example: As long as the product is not on the shelf, it is unlikely to be sold (although there might be exceptions for a number of products or markets, but in these cases also the time of availability will be crucial).

The buying pattern will also be an important element in time-phasing the availability. E.g. if THE FORECAST would be 12.000 units/year, this would be good enough for Marketing, Sales and Finance. The Distribution Network would like to know if this will come as a single order of 12.000 units, a monthly order of 1.000 units, a weekly of 250 units or maybe thousands of small orders of 1 or 2 pieces fragmented throughout the year. Another example might be products which are seasonal or whereby independent selling companies place one-time annual stock orders.

The other factors like 'enough' and 'right place' are issue that are shared with Supply Chain department.

- **Why PRODUCTION?**

PRODUCTION (if part of the internal organization) will also claim its role in THE FORECAST. Possibly Sales and Marketing have wild dreams about what could be sold, but if production is not able to realize these dreams, there will be a realistic chance that production capacity (based on bottleneck calculations) will become the decisive factor on THE FORECAST, or at least the timing of the forecast. Example here is that for a new product, the need to buy and install new machinery and thus operators to be hired or retrained is not unlikely.

- **Why SUPPLY CHAIN DEPARTMENT?**

Finally, SUPPLY CHAIN Department will claim responsibility for THE FORECAST. As they are in charge of the entire flow of products, from the (suppliers of the) suppliers to the (customers of the) customers, all their planning activities will be based on THE REAL FORECAST. Traditionally, they will attempt to collect the different forecasts from Marketing, Sales and Production and try to make the most likely forecast based on these and on historical data. They will then compare these forecasts with Finished Goods Inventories and committed Production Plans to calculate New Production Requirements and even, after balancing off the Raw Material Inventory, calculate and communicate the Raw Materials Requirements.

So finally, we have a number of stakeholders with different well-founded reasons why THE FORECAST-ing function should be positioned under their responsibility

But the fundamental question remains :

Where to position THE FORECAST-ing function?

In the next part, we will share our views on how to handle this.

THE FORECAST OR DIFFERENT FORECASTS ?

As explained above, different stakeholders have different forecasts meeting their departmental targets, visions and responsibilities. If these sets of numbers are all generated independently, this no doubt will result into extra costs and reduced service as described in the first section.

Should the aim be to have one common set of numbers agreed by all parties?

Not at all, as these sets of numbers are used for different purposes.

So what is the solution ?

The proposed solution simply is one forecast, THE SALES FORECAST, which will be the basis; and all other forecasts will be derivations from this one. These derivations might be direct or indirect, as you will notice further down.

SALES FORECAST BY MARKETING

Although the term sales forecast might be misleading, it should be the responsibility of MARKETING to set up the SALES FORECAST, and this should cover the very near future up to medium term or long term (3-10 years, depending on the kind of business and estimated life cycle of the products).

The forecast can be based on historical data (if at all available and relevant) as well as Sales and Marketing input. Short term SALES FORECAST should be established in close collaboration with Sales Department, whereas medium and long term will be more depending on market analysis. Expectations from Marketing and Sales should be compared and debated, in order to get consensus on the outcome. Special attention should be given to products influencing each other (positively and/or negatively). There might be cases where the increase of one product will lead to increase of any other product; but in other cases cannibalization might be experienced or expected : the increase of a product will result into the decrease of the other product. This phenomenon is typical for business models with short life cycles and many new product introductions. There also might be a 'timing' influence: higher sales during a product promotion may lead to decreased sales in the period after.

The level of detail (single item, group of items or full product lines; regional or centralized forecasts) as well as method or direction (top-bottom or bottom-top analysis) could vary from business to business and remain out of the scope of this paper.

A regular forecast REVISION is part of the forecasting process. Accuracy of the past forecast should be measured and relevant deviations should be analyzed. This analysis will result in more in-depth knowledge and understanding and will be one of the basics for the forecast REVISION. The frequency of revision is depending on the proven accuracy of the past forecasts as well as on the fluctuating market factors like new product introductions.

In today's' business world where we encounter more rapid changes and globalization resulting into longer lead times, it will be crucial to review the forecast on a regular basis. The recession in the past years has lead to a number of overstocked companies followed by longer periods of decreased production needs. Faster reaction times through regular forecast revision could have reduced these negative effects.

HAND OVER THE SALES FORECAST TO SUPPLY CHAIN !

As central department, responsible for product flow and information flow, Supply Chain should be the third party involved in establishing THE FORECAST (still owned by Marketing). It will be the role of Supply Chain to critically analyze the forecast, understand the assumptions and conditions and hence evaluate the feasibility of the forecast.

Factors like dependencies (e.g. cannibalization), timing, special activities etc. should be well understood and interpreted in order to calculate the inventory levels consequently desired at the different points within the organization (e.g. shops, local warehouses, central warehouses, production sites), in line with company policies and rules. These desired inventory levels will then be compared to current and predicted inventory levels over time (including committed production plans or purchase schedules), for calculating the NET INVENTORY REQUIREMENTS PLAN, without taking into account production or purchasing constraints.

NEGOTIATE SALES & OPERATIONS PLAN

This NET INVENTORY REQUIREMENTS PLAN will be the basis for the S&OP (Sales and Operations Plan), where above requirements will be set off against production capacity (mainly bottleneck study) as well as production stability (most industries prefer constant production throughput with fixed shut down periods).

Primarily the S&OP can be considered as a sort of internal negotiation, whereby on one hand Supply Chain aims to get the optimal result for the market (sales and warehouses), and whereby on the other hand Production targets to obtain the most efficient Rough Cut Capacity Plan (RCCP : overall production plan taking into account the capacity of the major bottle-necks). In fact, this is the cut-over point between push- and pull systems. The difference between what is required and what can be produced/purchased, in first instance will result into changes in projected inventory. It will be the responsibility of Supply Chain to evaluate the impact.

Different scenarios will be possible :

- Production can perfectly meet the NET INVENTORY REQUIREMENTS PLAN
- The S&OP deviates slightly from the requirements, without significant impact on the market
- The S&OP deviates in such a way from the requirements, that inventory levels will be far off optimal, but the original sales forecast can still be met. Here Supply Chain must make Sales and Marketing aware of deviations from sales forecast will most presumably result into problems
- The S&OP deviates from the requirements in such a way, that the sales forecast cannot be met. In this case, it will be the role of Supply Chain to communicate this

with Marketing and Sales and to agree on a revised sales forecast based on what is feasible.

TRANSLATE S&OP INTO PRODUCTION PLAN

Once the S&OP is agreed upon between Production and Supply Chain, Production is to take responsibility to translate the S&OP agreement into a detailed production plan. This S&OP will be the reference, and in the end, production output will be measured against the S&OP. In many organizations this is called the PRODUCTION SCORE, and should be one of the bases of production incentive.

If any anomalies or unforeseen constraints should be observed when converting the S&OP into the shop-floor planning, this should be fed back to Supply Chain immediately.

DISTRIBUTE RESULTS BY SUPPLY CHAIN

At this stage, we have a coherent production plan in line with the sales forecast as well as inventory targets and policies. As proclaimed owner of the overall plan, Supply Chain will now advise all levels of the organization on the data they require :

- planned distribution of finished goods to the different stock keeping units involved
- shipping department
- (if not done through the system) Purchase Department
- Sales Department on what will be available by when at the Points of Sale
- Accounting about financial impact (a.o. capital employed through inventory changes)
- any other relevant party

ABOUT THE AUTHOR

[Stefaan Vandooren](#) is an independent Supply Chain Management professional with over 25 years operational experience in forecasting and inventory management. Through his own company [eSVeeDee Consulting](#) he offers a range of solutions like interim management, project management, consultancy, coaching or training. Should you have any questions or remarks, please do not hesitate to contact stefaan@esveedee.be