



# Higher Service, Lower Stocks

Forecasting en demand management best practices



Planning & Control solutions in leading organisations

An Eye Opener research report

## Introduction

All companies need to predict future demand. For those producing to stock it determines that customers get the demanded products at the right time. For companies producing - or assembling to order, the forecast establishes the need to purchase correct critical materials and to reserve capacity.

Although an accurate forecast is crucial it is not an easy challenge. One statement always holds; the forecast is always wrong and subject to discussion. But, how accurate should a forecast be? What is the added value of having a more accurate forecast? Where should I focus on to achieve a better forecast? To get insight in the quality of the forecast, the business benefits of having a high quality forecast and the key drivers for forecast accuracy, EyeOn interviewed 50 supply chain professionals from the High Tech-, Food and Fast Moving Consumer Goods (FMCG) industry via a standard questionnaire<sup>1</sup>. The questionnaire included questions on organizational profile and market environment, the forecasting and demand planning process, organizational aspects, systems used and reported performance.

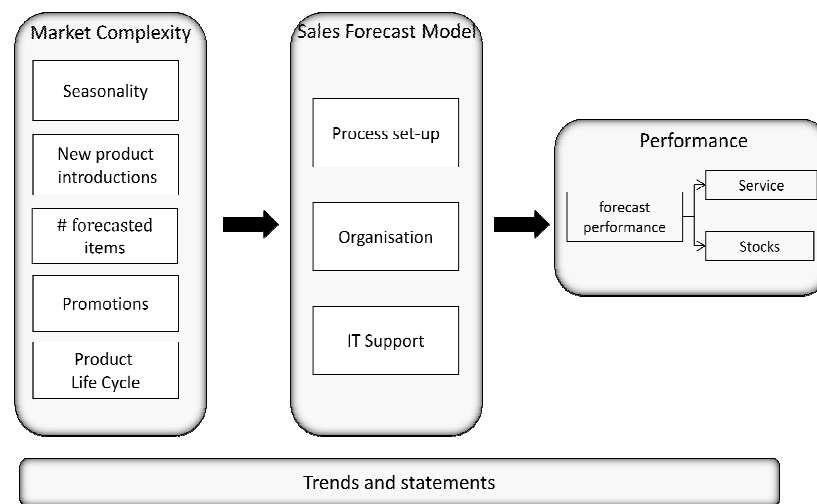


Figure 1. Benchmark set-up

In this paper we present a summary of the main conclusions<sup>2</sup>.

## Forecast improvement really pays off!

With forecast accuracy as key differentiator the participating companies have been marked as leader, follower or laggard. Comparing supply chain performance of these three groups shows that the high accuracy of the forecast leaders is associated with an excellent supply chain performance. On average the stock level of the forecast leaders is more than 40% lower and the service is 3% higher than that of the laggards.

<sup>1</sup> The questionnaire is available from [Benchmark@eyeon.nl](mailto:Benchmark@eyeon.nl)

<sup>2</sup> The full report can be obtained from the authors: Dr. Freek Aertsen, Ir. Erik van Kouwen, Ir. Stijn Rutjes, Ir. Andre Vriens, EyeOn, Croylaan 14, 5735 PC Aarle-Rixtel, The Netherlands Tel +31 492 388 850. <http://www.eyeon.nl/>

The importance the progress forecast accuracy is well recognized since 60 % of the companies are running forecast improvement programs. Best in Class companies that have a well designed and managed demand planning process and a mature organization are able to achieve a higher forecast accuracy, high service and lower stocks. In the next section we will show what differentiates the leaders from the laggards and how to achieve best-in-class forecast accuracy.

	Laggards (accuracy < 65%)	Followers (65 – 85%)	Leaders (>85%)
Supply chain KPI's			
• Customer service	92%	94%	95%
• Days stock (in weeks)	7.4	5.6	4.1

Table 1. Relation forecast accuracy and supply chain performance

## 4 ways to become a forecast leader

The research has shown that companies with a well designed and managed demand planning process and a mature organization achieve higher forecast accuracy, high service and lower stocks. The forecast leaders differentiate themselves by:

1. Designing a process for forecast ability
2. Installing a continuous Improvement loop
3. Increasing the frequency of the planning cycle
4. Employing high quality planners with correct skill set.

### Designed for forecast ability

In order to make high quality forecasts a solid analysis of product and market behavior is essential. Typical elements influencing the forecast ability are the:

1. Yearly number of new product introductions
2. Total number of products to be forecasted
3. Product life cycle
4. Percentage of promotions
5. Seasonality of the demand

Our research shows no direct relation between complexity as determined by market and



Fig. 2. Complexity versus forecast accuracy

product behavior and the achieved forecast accuracy. What really counts is the way companies have organized the process to master these challenges. Best in Class companies have designed the process to mitigate the impact of these 'disturbances'. For example, companies supplying to the retail market, where promotions are a big part of their turnover, have developed the process in such a way that acquiring a proper promotional forecast is crucial. For companies

in a high tech environment where the product life cycles are extremely short information from marketing on planned new product introductions is essential. The design of the promotion planning process, marketing forecasting and account forecasting really determines forecast accuracy.

### Promotional forecast

Companies that score high on promotional forecasting:

- Are able to register baseline and promotional sales separately
- Use different promotional profiles depending on the customer, type of promotions and season during the year
- Have Statistical models to create a promotional forecast
- Make proper agreements with their customers concerning the timing and expect lift factor of a promotion\

### Marketing forecast

Companies that score high on marketing forecast:

- Pay a lot of attention on the planning of new product ranges
- Evaluate their plans based on the latest market share developments
- Align the rationalization of products well throughout the whole organization
- Also have a long term focus on the forecast and involve marketing on long term market trends
- Use different forecasting models and a higher aggregation level for the long-term forecast

### Customer forecast

Companies that score high on customer forecasting:

- Make sure that sales is attending the demand planning meeting
- Look one step further ahead in the supply chain (a components supplier looks at the market of the end products, a supplier of end products looks into the retailers markets and receives Point-of-Sales data)
- Focuses on getting as much as relevant customer forecast information as possible

## Continuous improvement

One of the most important elements to create an accurate forecast is having a proper continuous improvement loop. The implementation of a well embedded Plan-Do-Check-Act (PDCA) loop, continuous improvement process, results in a high quality. Best-in-class companies actively involve their marketing & sales organization, to confront them with the low accuracy for their area of responsibility, ask them to evaluate the reason for the underperformance and support to improve accuracy. It is important that continuous improvement is not just sending around a monthly or weekly report. The real added value starts when people are motivated to give feedback and agree on actions to improve the forecast accuracy.

### *Companies that score high on continuous improvement:*

- Evaluate the forecasting process minimal once per quarter
- Use one generic definition of the forecast accuracy that is understandable for everybody in the organization
- Report the accuracy in multiple dimensions (customer, account manager, product, product category)
- Add dedicated comments to the forecast accuracy reporting
- Ask the responsible sales people to give their feedback on deviations
- Apply proper root-cause analysis on the main deviations
- Take the forecast accuracy along when creating the new forecast
- Use the accuracy measurement to determine bonuses of the demand planners and/or sales people
- Have the review of the forecast accuracy as a prominent agenda topic in the demand planning meeting
- Use the forecast accuracy to determine the safety stock levels

## Planning Cycle Frequency

Companies that have implemented a weekly forecast cycle have managed to reach significant lower stock levels. Most supply planning organizations are planning in weekly or daily buckets where the demand plan follows a monthly frequency and monthly buckets. The translation to the weekly buckets, required for the supply planning process, is often done by dividing the monthly demand plan by 4. Having a weekly demand planning cycle really adds value.

In some cases the complexity of the organization makes it hard to implement a weekly demand planning process. But also in those cases it can be worthwhile to have a weekly review of the demand situation by a limited group of people. Companies make the mistake to depend too much on the monthly buckets while the supply planning is already confronted with changing market circumstances during the course of the month. A weekly forecast validation can be used to make sure that the weekly supply planning is aligned with the latest market situation.

*Companies that score high on frequency of the forecast:*

- Have a weekly process where the forecast is evaluated and is adjusted when required.
- For companies where the complexity of the organization, market and product portfolio is high, it is wise to implement a 'light process' to have weekly evaluation of the forecast. In these light forecast cycles only Supply Chain, Sales & Marketing evaluate the forecast.
- Evaluate whether actual sales are structurally running ahead or are lacking compared to the previous forecast.

## High Quality planners

The planner makes the difference! Depending on education, experience and skill set the planner really influences forecast accuracy.

*Companies that score high on the planner quality:*

- Employ planners with at least a bachelor degree
- Acknowledge that experience really counts. The longer the experience the higher the forecast accuracy. But be aware! After a certain period (6 – 8 years) you run the risk that the planner gets bored and forecast accuracy deteriorates.
- Have planners that are critical about the forecast information received, actively challenge the numbers and have solid business knowledge.

## References

EyeOn is a consultancy firm that improves the bottom-line results of our customers by improving their forecasting and planning capabilities. We design and implement in maximum 100 days (tailor-made) solutions that really work.

### What does EyeOn stand for?

EyeOn is a consultancy and interim management company based in the Netherlands. EyeOn employs highly qualified consultants and interim managers with over 200 man years of experience in planning & control. EyeOn's core competence is improving planning & control processes in complex environments, focusing on supply chain planning and financial business processes in High Tech & Electronics, Food & FMCG, Process and Life Science industries. Customers are amongst others: ASML, Alcatel-Lucent, Bosch, DSM, Heineken, Logitech, NXP, Philips, Rockwool and TomTom.

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## Join the Benchmark

The benchmark allows you to compare your demand planning processes, organization and forecast accuracy with companies in a comparable business environment. After joining this benchmark you will be able to answer questions like: "How mature is my demand planning process compared with others?", "What are the strengths and weaknesses of my forecasting process?", "How many demand planners should I employ?", "How can I further improve my process and performance?"

### Approach

The benchmark will focus on the drivers influencing the capability to create an accurate forecast and the way the complete forecasting processes is executed. Furthermore, via a number of questions we will analyze the various activities in your forecast cycle to determine the level of maturity of your demand planning process.

The benchmark will be conducted via an online tool. It will take you about 1-2 hours to complete the benchmark.

### Results

Within two weeks EyeOn will provide you a custom-made benchmark report. This report contains an analysis of your results anonymously compared with other companies in your industry, leading to extended insight of the maturity of your processes and organization. Furthermore, the possibilities to further improve your processes, organization and business performance are explained.

We invite you to take part in this benchmark and create an in-depth view of your forecasting and demand planning performance! To participate: [Benchmark@EyeOn.nl](mailto:Benchmark@EyeOn.nl)

### Get in contact with EyeOn

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