

The benefits are clear: we are saving time and, by keeping Bias low, maintaining healthier inventory

Demand Planning for Pharma Client

Project

PEOPLE

10055

Forecast Analysis & Improvement as part of the client Demand Planning Improvement Project

Core Issues

The client team were somewhat lost as to how to compare and improve performance on a country by country basis.

Sequoia were asked to join the existing team and to focus on forecast analysis & improvement. for the pilot markets and then to define processes that would drive a positive impact on results globally.

Result

Global roll out of Sequoia Tool to identify best baseline forecasting approach resulted in a 5 percentage point increase in solely statistically forecast SKUs. Significant improvements in Bias, Forecast Accuracy and Forecast Value Add were delivered.

What Sequoia did

Sequoia joined an existing project team which included 3 pilot European countries, each with very different market characteristics and a total of around 4,000 SKUs which were being forecasted. Sequoia's role was to provide create a tool which enabled the analysis of forecast results of the local teams, using both client KPIs and also Sequoia's Forecast Value Add (COV)TM as the main indicator of performance.

Through a programme of comprehensive analysis and process review the team worked to identify causes and correlations in performance. The tool Sequoia created was able to both test and quantify the opportunity for introducing a statistical forecasting approach for baseline forecasting on a SKU by SKU basis, with the aim of freeing up time for the client teams to focus on NPIs, seasonal analysis and any specific events.

Back-Casting

The process employed was to use back-casting as a technique for identifying the performance of different algorithms on each SKU:Location to be forecast.

Raw data was refined and fed into the tool, which tested the performance of a range of algorithms and parameters. Where the opportunity to move to statistical forecasting existed, the benefit of moving to that approach was evaluated in terms of the impacts on Forecast Accuracy, Bias and Forecast Value Add. The results fed into dynamic charts that enabled drilldown to understand both the current and potential statistical forecasting performance on a SKU:Location basis.

Hearts and Minds

Sequoia continued to work alongside the country teams to jointly deliver an interactive workshop for the global team that focussed on the process and benefits of adopting the approach to moving to



more statistical forecasting. Sequoia incorporated their well-renowned physical games and activities to reinforce the logic and benefits of the recommendations.

The Results

Whilst the opportunities inevitably varied by country, overall a remarkable 70% of SKUs in the pilot countries were found to be suitable for a statistical forecasting approach. It was determined that by introducing the best fit model to each individual SKU, SKU Bias would be reduced significantly, with an overall improvement of up to 15%. In addition, the value add of the forecast along with a significant improvement in Forecast Value Add – in one country up to 55%.



Sequoia **Client Focus**

What happened next

Following the success of the workshop and buy-in from both the global team and key stakeholders, Sequoia undertook a comprehensive handover programme which focussed on ensuring a core implementation team were confident in deploying the back-casting forecast algorithm tool in each market.

In addition to this, global forecast KPIs were revised and enhanced on the basis of Seguoia's work. Once implemented, these were then to provide actionable feedback on performance and contributed to encouraging appropriate behaviours and conversations.

ERP Support

The client also embarked on an informed and focussed project with their ERP supplier to embed the process of determining the best statistical algorithm. This was to enable planning teams to conduct that type of analysis even more efficiently. This was combined with other enhancements to the forecast process, including a more robust approach to dealing with outlier data points, to ensure the statistical forecasting approach was as robust and appropriate as possible.



Global Roll Out Results

With Sequoia's tool deployed, each market team were able to identify :

- those SKUs suitable for statistical baseline forecasting
- the most appropriate algorithm to use for each SKU and
- the best parameters to feed the algorithm.

Less than 12 months after the study was completed the outcomes were impressive—the move to

statistical forecasting had already led to a 7.8% improvement in Forecast Bias—which would in turn have a direct impact on inventory levels. There was a clear commitment from the team to support the countries in the move to more statistical forecasting, as evidenced by a 5 percentage point increase within the first 10 months.

Statistical forecasting has led to a 7.9% reduction in Bias in 10 months

