



## 'Sweet spot': the optimal balance between availability and freshness with minimal food waste

Freshness, waste and product availability are critical drivers for supermarkets, especially for fresh products such as meat, fruits and vegetables. Often, high shelf availability has a negative impact on the freshness of products and can result in higher waste. With lower availability, higher freshness and reduced waste can be realized, but higher lost sales can be the consequence. The question is how to finetune the replenishment parameters to have the optimum balance between availability, the avoidance of food waste and freshness.

### Store replenishment simulation as a basis

As Jumbo had difficulties with finding the optimum balance, Jumbo requested EyeOn for support on the following challenges:

- It was unclear if the outcomes of the simulation model were an actual reflection of the reality
- The output of the simulation model did not facilitate decision making with different stakeholders within the organizations as results were not valorised yet in terms of costs.
- The simulation model had technical limitations as it could not yet do simulation runs in sequence with different parameter settings.

# JUMBO

### The role that EyeOn played: prove the potential

With EyeOn's industry knowledge and data science capabilities we managed to make data-driven analytics successfully work for Jumbo. EyeOn supported in the creation of a reliable and scalable simulation model, making sure that all dynamics were captured in the model correctly. Secondly, a pilot was run for three product groups in order to demonstrate the potential and to validate the simulation model.

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"For Jumbo, the sweet spot model is "the" enabler to make the best fact-based decisions for our fresh product assortment that will contribute to our bottom-line result and customer satisfaction. EyeOn was capable to co-create a fit for purpose model which combines simulation results from the digital twin of a Jumbo supermarket and financial parameters in order to come to reach the sweet spot. Next to that, and even so important for Jumbo, is that the model helps us to reduce waste in the total value chain and improve freshness on shelf, as we share our insights as well with our key suppliers and collaborate with them to make the best aligned end to end decisions."

Piet Verbakel, Manager Forecasting & Replenishment

BI dashboards were developed in order to visualize and analyse the outcomes of the simulation model. Next to that, enhancements on the existing simulation model were made by building the model in Python code. This enables Jumbo to link live data sources to collect input data for the simulations and to run the models on a larger scale.

"The results of this project really gave us confidence that changing our replenishment parameters result in better performance. The world of trial and error is a thing of the past. The dashboards that were built by EyeOn give us the ability to analyse outcomes on all possible aggregations. From product group up to item level, and from store type up to single store level. This way, we can work exception-based and can optimize and adjust settings for our complete fresh assortment within a short throughput time, really making an impact on the '7 certainties'.

Harm Smits, Tactical Replenishment

Together with EyeOn a plan was made to embed this model in the F&R process and organization, such that the outcomes keep contributing to Jumbo's mission.

## About Jumbo

Jumbo is a family business from Brabant, The Netherlands, with a rich entrepreneurial history. They operate in the Netherlands and Belgium. Jumbo currently has more than 680 supermarkets. Jumbo wants to make tasty and healthy food easily accessible to everyone. The unique Jumbo formula is used in all stores and online (best service and largest range at the lowest price) and customers can rely on the '7 certainties'. By always putting the customer first, Jumbo is one of the most appreciated supermarket chains. The Forecasting & Replenishment team contributes to customer satisfaction by taking care of maximized availability, quality and freshness at optimal costs in a demand driven chain for both bricks and clicks.

## Get in touch with our experts

Are you also experiencing more uncertainty and complexity in your end to end chain? Do you need support in designing, implementing and executing excellent (planning) processes as a discriminating factor for success? Read more on our website or contact one of our experts! Get in touch via [mail@eyeon.nl](mailto:mail@eyeon.nl).

## Our promise

We apply proven innovations on forecasting and planning. We approach our clients' challenges in the most pragmatic way possible. Using our extensive knowledge, we deliver valuable results and turn challenges into opportunities. This is how we develop and implement fit-for-purpose improvements with sustainable impact.