



IMPROVING INVENTORY MANAGEMENT THROUGH SALES FORECASTING

THE CHALLENGE

Our client, a major European car distributor, was experiencing difficulties to match demand and supply of vehicles on a regular basis. The management needed a tool to confidently forecast its sales, which would result in improvements in inventory management and numbers-based decision making process.

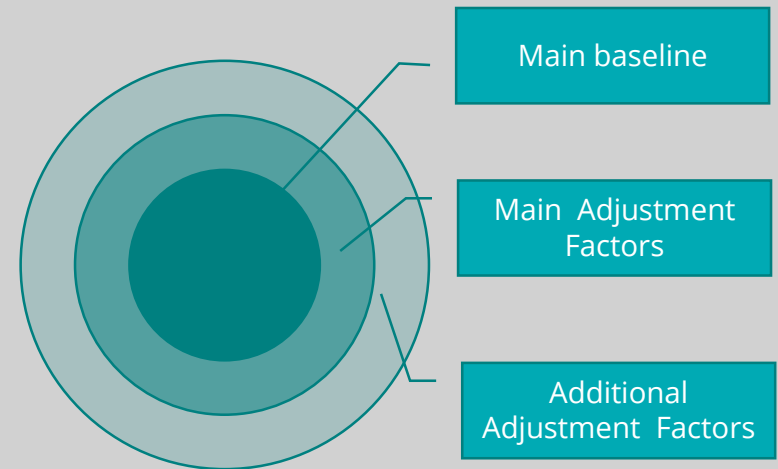
GEMSEEK'S APPROACH

GemSeek mobilized a team of data scientists and market researchers to build a forward-looking model focused on the coming 12 months. The model combines all data collection methods and forecasts the vehicle sales of the client on a monthly basis and its granularity is on segment, subsegment and model level.

OUTCOME

Due to the model's precision (it predicts 95% of the actual sales of the client), it became one of the most widespread tools used by the client's management across a variety of functions within the organization. Demand and supply discrepancies became a thing of the past and as a result inventory stock levels are now efficient and matched to the actual needs of the distributor.

SALES FORECASTING MODEL STRUCTURE



Main baseline – based on historical growth and “organic” unknown factors and it's formed by using ARIMA modeling

Main drivers adjustment layer – actual model sales are tested against some major internal drivers using Multiple regression (price, ATL, discounts)

Additional Adjustment Factors – a deep dive analyses on some non-typical factors e.g., new MY launches, aggressive competition campaigns, etc.