

Procurement Raw Material Commodity Forecast

Raw Material Commodity Forecast is set of tool based on three different platforms (SAP BW, Dataiku and QlikSense) that forecasts Raw Material Spend

- [Dataiku Dashboard \(For Raw material Analyst\)](#)
- [Forecast Raw Material Procurement Dashboard](#)
- [Spend MM Query](#)

- [1 Context](#)
- [2 Classification](#)
 - [2.1 stream](#)
 - [2.2 Value Chain](#)

Context

The purpose of the dashboard is to forecast the spend for raw material based on market indicators for commodities & material, historical spend and volume.

The first part is to find correlations between market indicators and value chain prices (for some value chains the correlation is computed at product level).

This part was done with the user to find the best indicator (which makes sense and with a good correlation score) for each value chain.

Once a good correlation is found, the forecast can be done in the second part. The forecast is based on the indicators (defined in the first part and the quantity in Kg of each product divided by the good dilution coefficient, the VKG).

The correlations and the forecasts are computed each month. Alerts are sent to the user when the correlation decreases too much and in this case, the correlation can be studied in the dashboard dataiku and modified if needed.

Finally the forecasts are plotted in a Qlik dashboard and in a Dataiku dashboard. In the Dataiku dashboard, the user can influence some variables (the index in % and the volume in %) and also the mapping Value Chain - Index. The Dataiku features are accessible to raw material analysts

Classification

stream

Value Chain

To forecast the spends of each stream and each GBU, correlations between market indicators and the prices of the products of each value chain are defined in a first part. In the second part, the forecast is done for each tuple (GBU-Product-Company Zone).

The forecast is done using the open-source library Prophet developed by Facebook.

Finally, the results are plotted in different dashboards (in Dataiku and in Qlik) where the users can see the forecasted spends at material value level or at GBU level quarterly.

The user can also influence the volume or the value of the indicator before the forecast.

