

# CEA - Order Book

## CUSTOMER ENGAGEMENT ANALYSIS

### General Description

#### Scope:

- All GBUs
- External Sales Orders only (excluding Internal Sales, based on Intra-group Flag on each Sold-to)
- Consolidated Entities = Yes (this is based on a consolidation % of each Legal entity. We apply that percentage to the sales. i.e. consolidation 50%, we show only 50% of sales)
- Exclusion of Peroxide JVs (0360 Nippon Solvay, 5985 Basip Silent Partner, 6034 Mtp Hpjj (Thailand), 6235 Saudi Hydrogen Per)

#### KPIs:

- Total Order Book M (Invoiced + Pending + Not Confirmed)
- Invoiced M
- Pending M (Confirmed + Shipped not billed)
- Not Confirmed M, this can be switched on or off with the Y/N selection)
- M+1
- M+2
- M+3
- Actual Sales EoM Y-1

Available in both M€ and volumes in Tonnes

#### Key Figures:

- **Orderbook (M€)** - takes by default the last Orderbook snapshot. Otherwise the snapshot of the selected date.
- **MoM Evolution** - % comparison of Orderbook with M-1.
  - Check for the same date M-1\*\*\*.
- **Mo3M Evolution** - % comparison of Orderbook with the last 3 months average.
  - Check for the same date M-1, M-2 and M-3\*\*\*.
- **YoY Evolution** - % comparison of the Orderbook with the same month Y-1.
  - Based on Actual EX rate - for Y-1 data we take the CAR3 monthly exchange rate of each month previous year
  - Based on RSB - for Y-1 data we take the CAR3 monthly exchange rate of each month of the current year.
- **EOM Extrapolation**
  - (M€) - calculates the % variation between M-1\*\*\* and today, and adds/subtracts this % variation with the result of Actual Sales EoM M-1. *Example 5th November: Orderbook Nov 5th vs. Oct 5th => +7%, Extrapolation Nov : 716M€ +7% => 764M€*
  - (%) vs. RSB EoM Y-1 - % comparison of the extrapolation with the same month Y-1 restated (RSB) using CAR3 monthly exchange rate of current year.
- **AI Prediction**
  - (M€) - using Machine learning [Random Forest + Extrapolation Method](#), the AI algorithm aims at predicting the EoM Sales figure. We receive daily an adjusted prediction based on new daily data sent from QlikSens to Dataiku Cloud Storage. Once a month the entire model is re-trained in order to take into consideration any End-use, Segments or Market changes.
  - (%) vs. RSB EoM Y-1 - % comparison of the AI Prediction with the same month Y-1 restated (RSB) using CAR3 monthly exchange rate of current year.

\*\*\*Check for the same date M-1, M-2 and M-3

### Target Users

- ExCom members
- Excellence Center
- GBU Leadership Team

### Authorization & Rights

All GBUs or by GBU.

- if available use that date for automatic comparison
- if not available (i.e.: weekend) use the previous day available
- if none exist for M-1, then take the next available date

## Dimensions:

### [Dimensions Overview](#)

### [Data Mappings](#)

## Exceptions:

- The first of each month of the Order book is replaced by M-1 Actual Sales.
- **Data corrections** may be applied to historical data by Commercial Excellence team.

## Currencies and Exchange Rate:

- **Pending, M+1, M+2, M+3** : extracted in local currency and converted to EUR using CAR4 exchange rate, which are simulated future rates defined by corporate finance
- **Invoiced, Actual Sales M-1, Actual Sales EoM Y-1** : extracted in local currency and converted to EUR using CAR3 exchange rate, which is the monthly average rate applied to each month in question
- **Composite Materials Actual Sales and Order Book**: displayed EUR which are already converted by the GBU

\*Snapshots are stored in EUR, with the rate at the time we take the snapshot. If the rate is revised (monthly revision for instance), it will have no impact on the snapshot.

## Sources:

- Pending, Not Confirmed, M+1, M+2, M+3 : BW Global Sales query (QVSD\_BW\_QRY\_MVSDSO41\_SD004)
- Invoiced, Actual Sales M-1, Actual Sales EoM Y-1 : BW P&L query (QVSBS\_BW\_QRY\_MVCOPA01\_0004)
- Manual flat file for Composite Materials - QV server folder: \\WDCQSAP31\Composite Materials Manual Sales
  - Full GBU Order Book
  - External Sales excl WP1
  - WP1 Actual Sales come from the P&L query.
- AI Prediction - QlikSense exports daily the whole order book database for the training of the AI algorithm. Each day the model sends back to QlikSense the last EoM prediction. Once a month the entire model is re-trained in order to take into consideration any End-use, Segments or Market changes.
- GBU Demand Forecast: Dynasis Forecasts Query (BW Query QVSBS\_BW\_QRY\_MVDYN11\_0001)

## Data Refresh Frequency:

- Daily CET (morning, mid-day, evening). Snapshot are saved after last data refresh of the day.
- For Composite Materials, the manual data files are posted Weekly (on Monday afternoons) for Order Book, and monthly after closing for Actual Sales excluding WP1

### Data Snapshots

This dashboard introduces the concept of historized snapshot that we didn't have until now in the previous dashboards. The daily state of indicators is stored in QlikSense, with strictly necessary dimensions useful for this dashboard.