Analytics Case Study

Perfetti van Melle



Problem statement



Perfetti van Melle (PVM) manufactures a variety of candies and confectionaries which are sold around the world. These include brands such as Chupa-Chups and Mentos. In this case study, you are given data from PVM's production facility in Turkey, which exports PVM products to several countries and regions.

For this case study, you are expected to analyse the data given, to gain insights into PVM's production. In particular you should try to answer the following questions:

- A) Assuming that the volume of production is an indirect indicator of sales (or demand), which are the top 10 countries / regions in which this PVM production facility did the most sales in 2021/22?
- B) Which were the top 5 best selling products in these regions?
- Comment on the sales trends in these regions and about the above products for the period of the data provided
- D) Are there any trends or dependencies you can observe in sales, across the various countries and regions? Based on those observations, what would you recommend to management?
- E) Comment on any other observations during your exploratory data analysis
- *Optional:* Build a model* for forecasting the overall production for the next 3 months (across all countries and regions)

^{*} In case you do not have time to complete your model, make sure to write down some steps and approaches you would take to build your forecasting model and how you would evaluate these models?

Data description and assumptions



SKU: Stock Keeping Unit, which is the ID for the product being referenced

SKU description: Description of the product. The description may contain information about the export country or region, weight, packaging, pricing and other distinguishing features of the product

Volume: The weight of the product in tonnes

Country: Country or region to which the product was exported

Month: Reporting month of the data

Version: Extraction date of the data

You should have 7450 records in total.

For purposes of this case study, use the following grouping for different countries and regions:

AT = AT_DE + AU_DE + AU_DE_HU

BE = BE + BE FR + BE NL

CEE = BG + CEE + CZ + SLO + SK + RO + SI + AL + HR

CH = CH + CH AT

CIS = CIS + RU_ BY_KZ

 $ES = ES + ES_PT$

NL = NL + NL_BE + NL_UK

SCAN = Scandinavia excluding Denmark

GOOD LUCK!

