

# Perfetti van Melle (PVM) Report – Forecast Model Solution

This project contains a Jupyter Notebook designed to analyze and forecast the overall production for the next 3 months (across all countries and regions) for PVM's production facility in Turkey. The notebook includes data extraction, preprocessing, and forecasting model implementation.

## Prerequisites

Before running the notebook, ensure you have the following installed:

- Python
- Jupyter Notebook or VS Code or any other IDE.

## Required Libraries

Run the following command in your terminal or command prompt to install the necessary libraries:

```
pip install pandas seaborn matplotlib numpy scipy scikit-learn
```

## How to Run the Notebook

### 1. Download the Zip File

Download and unzip folder. The notebook file is "Model\_Notebook.ipynb". Ensure the necessary data files are placed in the appropriate directory.

### 2. Launch IDE

Navigate to the directory containing the notebook, and start Jupyter Notebook or VS Code

### 3. Open the Notebook

In the Jupyter/VS Code interface, locate and open `Model\_Notebook.ipynb`.

### 4. Run Cells

Run each cell sequentially by clicking "Run" or using `Shift + Enter`.