Business Forecasting

Business Forecasting is one of the applications of Time Series forecasting. In Business Forecasting, we aim to forecast future sales, expenditure, or revenue by using the historical Time Series Data generated by the business.

Why does a Business needs Business Forecasting?
Every business is looking for strategies to improve its profits. Data Science professionals play a vital role in providing the most accurate predictions at any given time. The data generated by a company always comes in handy for analyzing the future behavior of target customers. By predicting future business trends, a business can take better decisions to improve its future performance.

The code explanation:

Firstly, we import the necessary libraries and dataset which I have uploaded.
The dataset contains two columns; Time Period and Revenue. The Time Period column contains the quarterly revenue of Adidas from 2000 to 2021, and the Revenue column contains the sales revenue in millions (euros). Let us have a look at the quarterly sales revenue of Adidas.
The sales revenue data of Adidas is seasonal as the quarterly revenue increases and decreases every quarter. Below is how we can check the seasonality of any time series data.
I will use the Seasonal ARIMA (SARIMA) model to forecast the quarterly sales revenue of Adidas. Before using the SARIMA model, it is necessary to find the p, d, and q values. You can learn how to find p, d, and q values from **here**.
As the data is not stationary, the value of d is 1. To find the values of p and q, we can use the autocorrelation and partial autocorrelation plots.
Now here is how to train a SARIMA model to predict the quarterly revenue of Adidas.
So this is how you can perform business forecasting using the Python programming language.