Superstore Sales Dashboard

Objective:

To contribute to the success of a business by utilising data analysis techniques, specifically focussing on time series analysis, to provide valuable insights and accurate sales forecasting.

Description:

The objective can be broken down into the following detailed components:

1. **Dashboard Creation :** Identify the KPIs (Key Performance Indicators), design an intuitive and visually appealing dashboard, add interactive visualisations and filtering capabilities to allow users to explore the data at various levels of granularity.
2. **Data Analysis :** Provide valuable insights to business entities regarding the effectiveness of their sales strategies through visualisations and charts
3. **Sales Forecasting :** Leverage historic data and apply time series analysis to generate sales forecasts for the next 15 days.
4. **Actionable Insights and Recommendations :** End goal is to share valuable insights and actionable information that can drive strategic decision-making to support the supermarket's goals for growth, efficiency, and customer satisfaction.

Dataset Used:

The dataset used in the project is about the purchases made from a sales store. The dataset contains the following relevant columns :

- **Row ID** - A column containing unique IDs associated with each row
- **Order ID** - A column containing unique IDs associated with each purchase/order
- **Order Date** - A column containing the dates on which the order had been made in the DD-MM-YYYY format
- **Ship Date** - A column containing the dates on which the order had been delivered in the DD-MM-YYYY format
- **Ship Mode** - A categorical column indicating the mode of shipment
- **Customer ID** - A column containing unique IDs associated with each customer
- **Customer Name** - A column containing the names of the customers
- **Segment** - A categorical column mentioning the type of orders
- **Country** - A column containing a single value ie. United States referring to the nationalities of the customers
- **City** - A column referring to the native cities of the customers
- **State** - A column referring to the states of the customers
- **Region** - A column referring to the geographical regions of the customers
- **Product ID** - A column containing unique IDs associated with each product
- **Category** - A column indicating the Categories to which each of the product belongs
- **Sub-Category** - A column indicating the Sub-Categories to which each of the product belongs
- **Product Name** - A column containing the names of the products
- **Sales** - A column consisting of selling prices of each of the product
- **Quantity** - A column containing the quantities of each of the sold product

- **Profit** - A column containing the profit made on each of the sold product
- **Returns** - A column indicating if the product was returned or not
- **Payment Mode** - A column indicating the payment modes adopted by the customers

Insights:-

- The maximum sales happen to be through Cash on Delivery (COD) mode and thus the company needs to make this option widely accessible on most of the products
- The maximum sales happen to be for the “Consumer” segment. Thus good of such category need to be given more attention in terms of availability
- The West region contributes most in the sales
- On an average it takes 4 days for a product to reach the customer after purchase
- October and December seem to be most profitable months in both 2019 and 2020
- Standard class shipment is mostly preferred
- In terms of category, the goods of “Office Supplies” category generate most of the sales
- In states, “California” generates most of the sales
- As per the forecast for the next 15 days, the sales will almost remain constant for this period

Learning:-

Incorporated data analysis techniques, specialising in time series analysis, to deliver valuable insights, accurate sales forecasting, and interactive dashboard creation, driving business success.