Lesson 07: Growmart Sales Analysis

Overview

In this project, you will utilize Tableau's capabilities to visualize and analyze Growmart order data. The primary objectives include exploring trends and patterns, creating complex visualizations, and drawing actionable insights from the data. The project focuses on a fictional scenario involving the dataset of orders received by a prominent superstore, Growmart.

Instructions

- Review the learning materials in Lesson 07
- Carefully read the situation, task, actions, and result sections to grasp the assignment fully
- Complete and submit your assignment via the Learning Management System (LMS)
- Use **Sample - Superstore-2017-2020** dataset provided in the Reference Material section on LMS

Situation

You are a data analyst working for a prominent superstore, Growmart, with diverse order requirements across multiple regions. Your manager has given you the **Sample - Superstore-2017-2020** dataset for analyzing order data, including information about orders, products, customers, and sales. The company is interested in understanding customer purchase trends, correlations, and opportunities within the Superstore order data that can inform the company’s strategic decision-making for the next quarter.

Task

Your primary responsibility as a data analyst is to perform a sales performance analysis utilizing Tableau's advanced charting capabilities to visualize trend factors for business growth.

Action

1. **Dataset connection**
    - Import the **Sample - Superstore-2017-2020** dataset into the Tableau Desktop

2. **Implement a Gantt chart**
    - Create a Gantt chart using **Order Date**, **Sub-Category**, and **Region**:
        - Add the **Order Date** field to **Columns**. Add the **Sub-Category** and **Region** fields to **Rows**.
        - Change the **Order Date** from **Year** to **Week**
        - Create a calculated field and apply the following condition: **DATETRUNC('week', [Order Date])**
        - Name the calculated field as **OrderRegion** and write the formula, then click **Apply** and **OK**
        - Drag the calculated field **OrderRegion** and drop it into the **Size** section in the **Marks** card
        - Right-click on the field **YEAR(OrderRegion)**, click on **Measure**, and select the **Count** option from the list
        - Drag and drop **WEEK(Order Date)** to the **Filter** card and select **Range of Dates** from the filter list
        - Drag and drop **Order Date** to **Columns** and change the measure **WEEK(Order Date)**
        - Drag and drop the **Ship Mode** variable into the **Color** tile in the **Marks** card

3. **Implement a Motion chart**
    - Create a Motion chart using **Order Date**, **Sales**, and **States**:
        - Add **Order Date** to **Columns** and **Sales** to **Rows**
        - Change the **Order Date** from **Year** to **Month**
        - Drag and drop **State** into the **Color** tile in the **Marks** card and click on **Add all members**
        - Right-click on **State** to filter it. Select **Alabama**, **Connecticut**, **District of Columbia**, and **Idaho** from the list
        - Drag and drop **Order Date** to **Pages** card (above Marks card)
        - Right-click on **YEAR(Order Date)** in **Pages** to change it to **Month**
        - In **Marks** card, change **Automatic** to **Square**

- On the right side of Tableau Desktop, inside the **MONTH(Order Date)** box, click the play button
- Select the **Show History** checkbox below the play button. Click on show history for all and select **Trails** in **Show**. Then format the trail as a dotted line.
- Click the play button again

4. Analysis and insights generation

- Utilize the Gantt chart to analyze the order dates of different product categories in different regions. Identify patterns in the chart such as highest ordered sub-category or highest order received date.
- Utilize the Motion chart to observe how sales trends evolve over Order Date across States. Find the State with the highest Sales and the State with the maximum Sales amount variation.
- Create a report summarizing your findings from both charts

Result

Your submission should include screenshots illustrating each step performed in the Word document showcasing actionable insights into sales performance, including top-sales regions, monthly sales trends, and product categories driving sales. Upload the Word document to the Learning Management System (LMS).

Rubric

Your submission will be evaluated based on the following key criteria, each representing a crucial aspect of the project. These criteria are:

Criteria	Complete or Incomplete
Data Connection: Import the given dataset to Tableau Desktop	
Implement Gantt Chart: Check if all the steps are performed in the correct order and the final Gantt chart created is correct	
Implement Motion Chart:	

Check if all the steps are performed in the correct order and the final Motion chart created is correct	