DataLeum

Introduction

Congratulations on completing your Power BI beginners' class. We have put this assignment together to help further cement your knowledge of the specific technologies you have learnt in your classes.

Support
Support and advice during your assignment is available through the WhatsApp group, if you have any difficulties, please feel free to ask a question.

Reporting
Upon completion of your assignment, you will need to submit your PowerPoint under the following headings
   - Executive summary
   - Key findings /Solutions (in bullet points)
       • 1
       • 2 etc.

   - Recommendations (to the business, based on your solutions)
   - Conclusion

Presentation
After your assignment has been submitted, you will prepare a Power BI Report and a PowerPoint presentation for presentation to the class, who will critique your report and advice on how you can develop yourself further.

Analysis Scenario

Optimus-Elite Superstore, founded in 2010, has grown steadily to become a prominent player in the retail market. Specializing in a diverse range of products from electronics to office supplies, the store caters to a broad customer base across various regions. With a focus on customer satisfaction and operational efficiency, Optimus-Elite Superstore prides itself on delivering quality products with a swift and reliable order fulfillment system.

As a data analyst, your task is to delve into the provided data to extract meaningful insights that can guide future strategies. Your analysis will be instrumental in identifying strengths, weaknesses, and opportunities for growth.

Objective:

Your objective is to analyze the provided data and answer the questions below. This will help in understanding the store's operational strengths and weaknesses,

identifying opportunities for growth, and recommending strategies for improvement.

Data Dictionary

- **Order ID**: A unique alphanumeric identifier assigned to each order.
- **Order Date**: The date format is YYYY-MM-DD. This column helps in analyzing sales trends over time.
- **Ship Date**: The date when the order was shipped. It helps in calculating the order processing time.
- **Ship Mode**: The shipping modes available are designed to accommodate various delivery needs. **Same Day** shipping ensures that orders are delivered on the same day they are placed. **First Class** shipping typically delivers orders within approximately 2 days. **Second Class** shipping takes around 5 days for delivery, while **Standard** shipping has an estimated delivery time of approximately 10 days.
- **Customer ID**: A unique identifier for each customer, useful for customer segmentation and analysis.
- **Segment**: Indicates the customer segment which can be used for targeted marketing strategies.
- **Region**: Represents the broader region where the order was delivered, useful for regional performance analysis.
- **State**: Specifies the state within the region, allowing for more granular geographic analysis.
- **Product ID**: A unique identifier for each product, useful for product performance analysis.
- **Price**: Represents the price generated from the order.
- **Quantity**: Indicates the number of units sold in the order.
- **Cost of Sales**: Represents the cost incurred to produce the products sold in

the order.
- **Order Priority**: Indicates the urgency of the order, which can impact customer satisfaction and operational efficiency.

Questions

- Calcuate the following:
    1. Revenue
    2. Profit
- Calculate the total profit generated by Optimus-Elite Superstore,how many products they sale and determine the total quantity of items sold.
- Identify the bottom five products that generated the least profit. What was the total profit for each of these products?
- Evaluate the performance of regional managers based on the profit generated in their respective regions.
- Which Product sub-category brings in the most profit?
- Determine which order priority level (High, Medium, Critical, Low) contributed the most to the total profit.
- Identify the month with the highest profit in 2013. How much profit was generated in that month?
- Identify the top five performing states by profit and specify the amount generated by each. Compare this to the bottom five states in terms of profit.
- Determine which segment (Consumer, Corporate, Home Office) contributed the most to the total profit. Provide the profit amount for this segment.
- What is the revenue trend over the years of operation for Optimus-Elite Superstore.