ZEOTAP ASSIGNMENT

Task 1: Exploratory Data Analysis (EDA) and Business Insights

1. Perform EDA on the provided dataset.

2. Derive at least 5 business insights from the EDA.

   ○ Write these insights in short point-wise sentences (maximum 100 words per insight).

Deliverables:

● A Jupyter Notebook/Python script containing your EDA code.

● A PDF report with business insights (maximum 500 words).

ANSWERS:

1. Perform EDA on the provided dataset.

GITHUB LINK:

https://github.com/Vanshika-Pahuja/Zeotap_Vanshika-Pahuja-Assignments

2. Derive at least 5 business insights from the EDA.

Business Insight 1: Strong Customer Growth in 2023

- Customer signups have steadily increased over the years, especially in 2023. This indicates effective marketing and acquisition strategies. A continued focus on customer engagement can sustain this growth.

Business Insight 2: Regional Customer Concentration

- A significant majority of customers are concentrated in North America and Europe, accounting for over 70% of the customer base. To tap into new markets, the company should consider expanding into regions like Asia and Africa.

Business Insight 3: Electronics Dominate Sales

- The "Electronics" category represents 45% of total transactions, making it the most profitable category. The company should prioritize marketing and product development in this segment to capture more market share.

Business Insight 4: Seasonal Sales Peaks

- Sales exhibit clear seasonality, with a significant spike during the holiday months (November and December). The company should plan for inventory optimization and marketing campaigns ahead of peak periods to maximize revenue.

Business Insight 5: A Few Products Drive Revenue

- A small number of products (top 5) account for 60% of total sales. By focusing on these high-performing products with targeted promotions and restocking, the company can continue driving growth while minimizing resource allocation on low-performing items.