TASK-1

Exploratory Data Analysis and Business Insights Report

I analyzed the customer, product, and transaction data to understand how the business is performing. After combining and examining the data, here are the key insights I found:

1. Top Customers Bring in the Most Money

The top 10 customers are responsible for a big portion of the revenue, with Paul Parsons spending over \$10,000. These customers are very important to the business. Keeping them happy and loyal with personalized offers and better services can increase their spending further.

2. Some Products Sell Much More Than Others

A few products, like the ActiveWear Smartwatch and SoundWave Headphones, are selling the most. These are popular among customers and should be prioritized for stocking and promotions. Focusing on these best-sellers can help grow sales faster.

3. Sales are Higher During Certain Times of the Year

Sales peak in months like December and June, likely due to holidays and mid-year promotions. These are key periods to increase advertising, offer discounts, and launch new products to make the most of the demand.

4. Some Regions Perform Better Than Others

South America generates the most revenue compared to other regions like Asia and North America. There's potential to improve sales in regions that are not performing as well by running special campaigns or offering products suited to those customers.

5. Products Cover a Wide Range of Prices

The products available cater to all types of customers, from budget-friendly options to expensive items. This variety is a strength because it attracts different kinds of shoppers. However, understanding which price ranges make the most profit can help focus on the right products.

6. Books and Electronics are the Best Categories

The Books and Electronics categories bring in the most money, followed by Clothing and Home Décor. It's a good idea to focus more on the top categories while finding ways to improve sales in the lower-performing ones.

Conclusion:

This analysis shows that focusing on top customers, best-selling products, and high-performing regions can help the business grow. Planning for busy seasons and improving performance in weaker areas will also make a big difference. These insights give clear steps to improve revenue and better serve customers.

Graphs:











