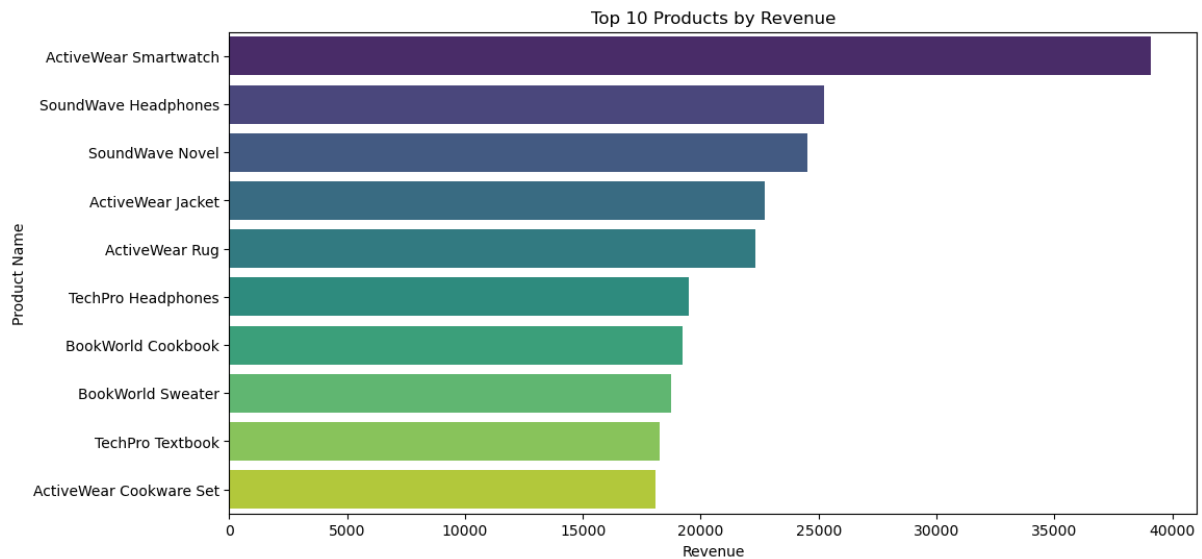**Name: Vansh Gupta**

Institute: Vellore Institute of Technology, Vellore, Tamil Nadu.

Subject: EDA PDF for Data Science Internship Assignment Submission.
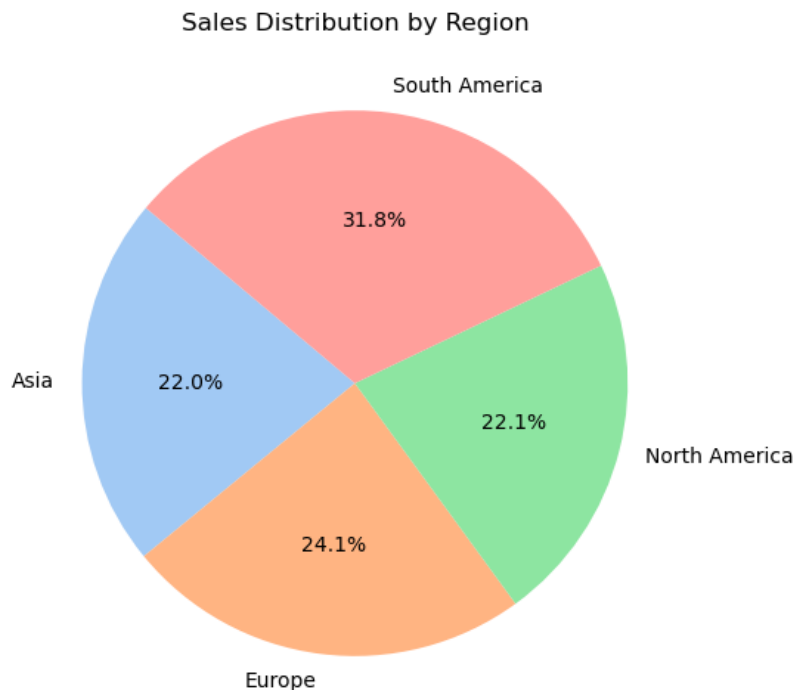
1. TOP 10 PRODUCTS BY REVENUE

Insight:

These top 10 products contribute significantly to overall revenue, with ActiveWear Smartwatch being the highest revenue generator. To maximize sales, businesses should focus on promoting, advertising, and offering discounts or bundles for these products.
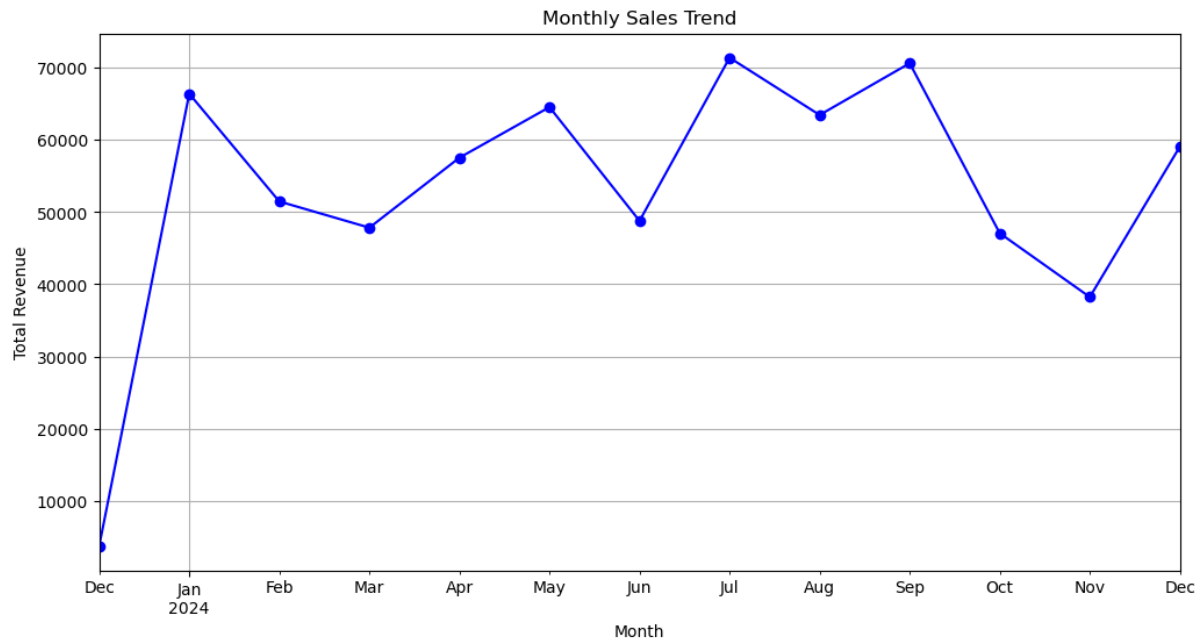
2. SALES DISTRIBUTION BY REGION

Insight: South America accounts for the majority of sales (31.8%), followed by Europe. North America and Asia contributes to nearabout same, i.e, 22% which is

also the the least, indicating untapped market potential for expansion in both these regions.
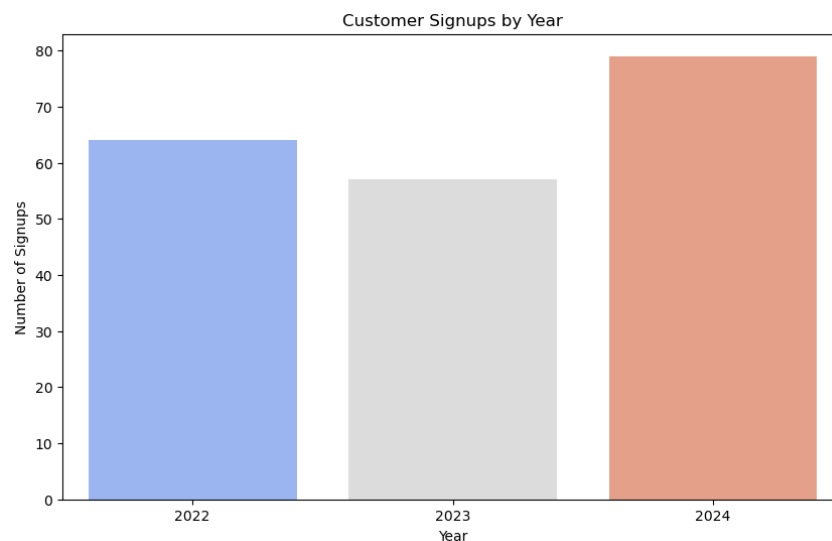
3. MONTHLY SALES TREND

Insight:

Sales exhibit a seasonal pattern, with peaks during July to September, likely due to school and college openings. This suggests a need to ramp up marketing, inventory, promotional campaigns, and regional advertisements during these months to capture demand effectively.

4. CUSTOMER SIGNUPS BY YEAR

Insight:

The bar chart shows customer signups from 2022 to 2024, with a steady increase. Signups grew significantly in 2024, indicating improved customer acquisition strategies or market demand. The dip in 2023 may point to temporary challenges or reduced marketing efforts. We should focus on sustaining 2024's growth momentum by analyzing successful strategies and addressing past hurdles which we were able to overcome and should takeaway keylearnings.

5. PRODUCT CATEGORY DISTRIBUTION

Product Category Distribution
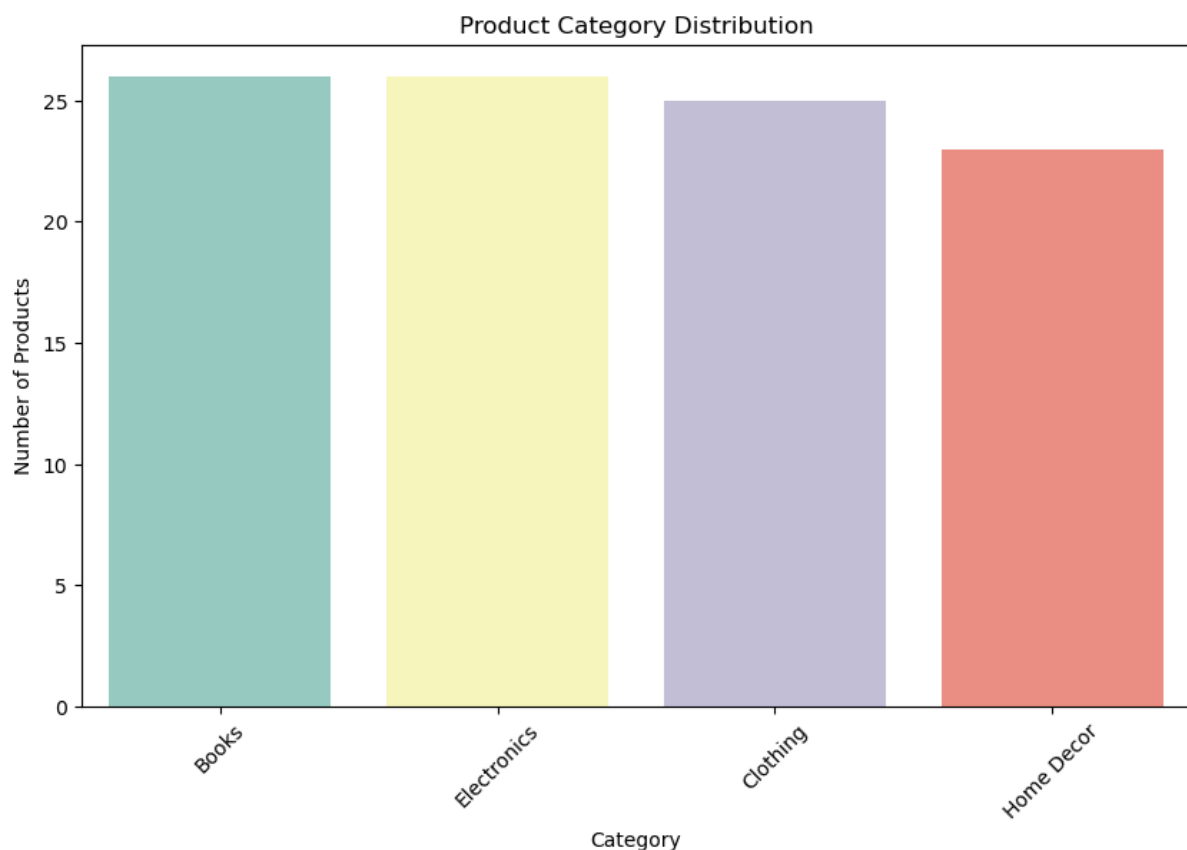
Insight:

1. Books and Electronics dominate the product catalog, while the other two categories have significantly fewer products, indicating a lack of diversity in offerings.

2. Diversifying offerings in less-represented categories can attract a broader audience, create new revenue streams, and ensure long-term sustainability by reducing overdependence on a few high-performing categories.

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