Data Science Intern Assignment | Zeotap| Ipshita Das

Task 1

Business Insights from EDA

The eCommerce transaction data may provide you with the following business insights:

1. Customer segmentation: Based on demographics, past transactions, and purchasing patterns, there are identifiable groups of customers. Identifying these segments can enable targeted marketing and personalized recommendations.
2. Regional Variation in Sales: There are notable regional differences in both sales and client preferences. Marketing plans and inventory management can benefit from an understanding of these regional tendencies.
3. Product Performance: Certain product categories or goods are more well-liked and bring in greater revenue than others. Product development, price, and promotion decisions can all be influenced by performance analysis.
4. Seasonality and Trends: Transaction data may indicate seasonal patterns or trends in client purchases. This data can help improve inventory management and marketing initiatives.
5. High-Value Customers: A small group of customers might generate a disproportionately significant amount of money. Identifying and nurturing these high-value clients is critical to business growth.
6. Analyze the elements that contribute to customer churn (customers who cease making purchases). Understanding turnover can help you build retention initiatives.

Additional Tips:

- Quantify your findings whenever feasible. Instead of simply stating "some products are more popular," mention the difference in sales or revenue between the best-performing products and the remainder.
- Use visuals to effectively communicate your findings. Charts and graphs can help make your ideas more impactful and understandable.

- Relate your insights to business decisions. Explain how your findings could be used to improve marketing, sales, product development, or customer relationship management.
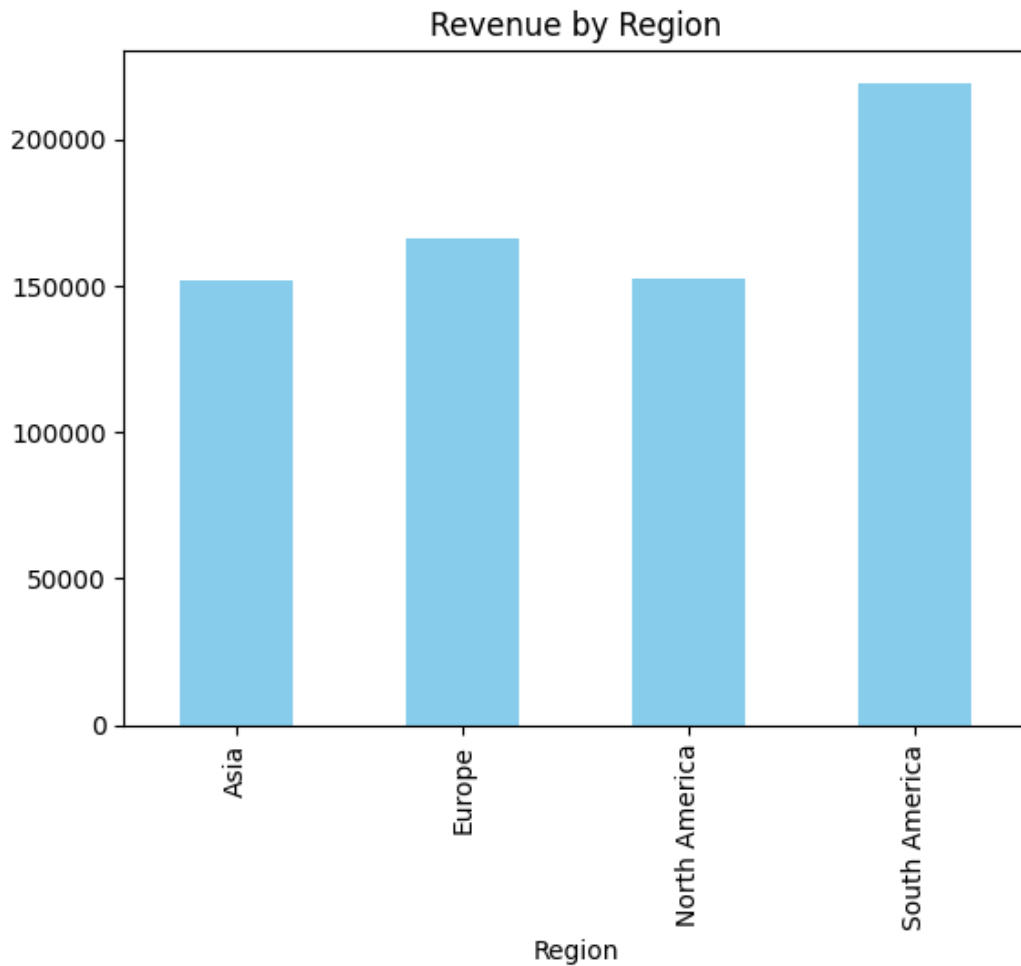
Some EDA on dataset:
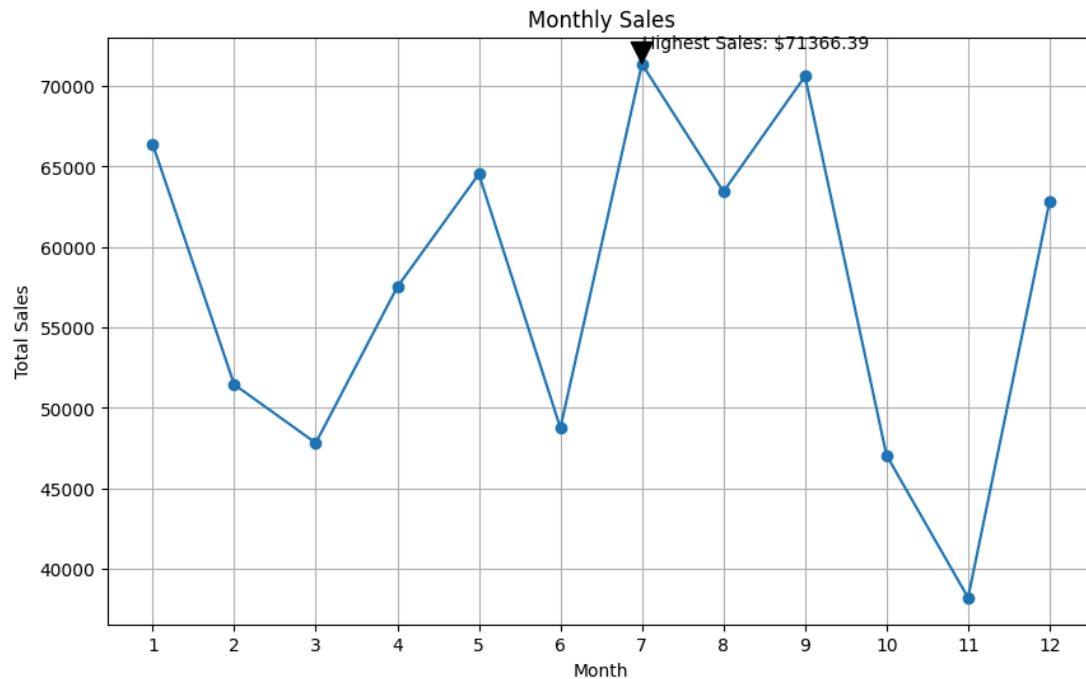
July has the highest sale
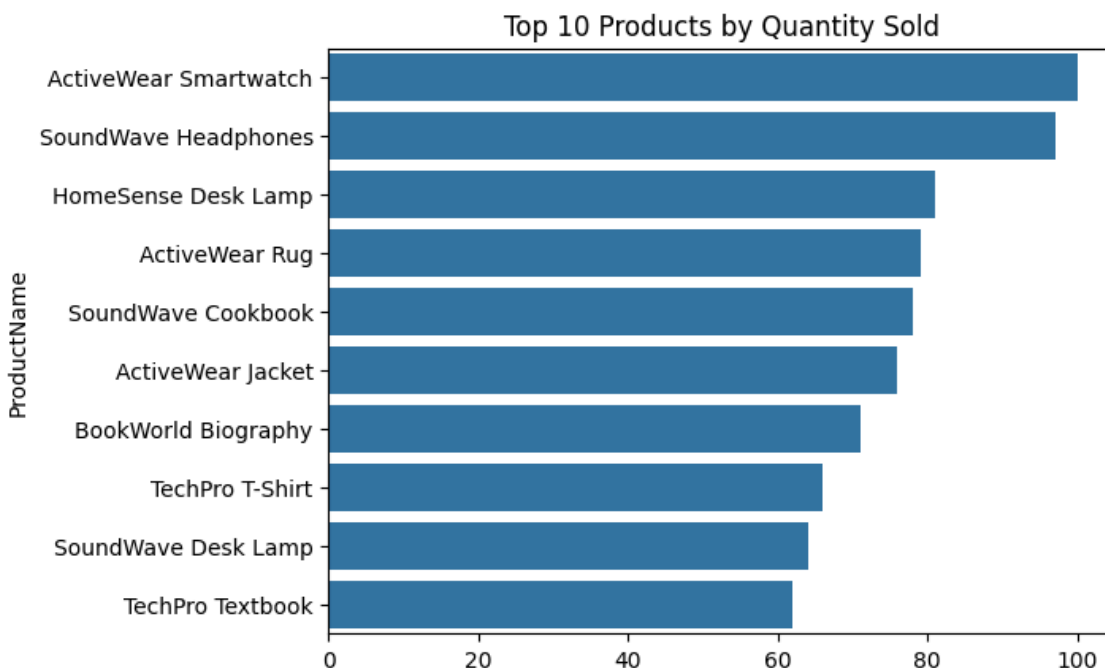
Customer Behavior:
Here we can see transactions per customer.
We can also identify the most frequent customers.

Revenue by Region

Revenue Analysis:
We can see the total revenue for each region.
ActiveWear Smartwatch is the product and **South America** is the region contributing most to revenue.