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TOPIC: Business insights on EDA

1. Demand on Products and Performance.

For instance, certain products like P067, P034, and P057 were notable in having higher sales volume; this is evident through the bar plot of total quantity sold for each product. This clearly signifies that customers do prefer these products more. Marketing strategies and inventory planning could be given more emphasis on items that earn high sales volumes. However, low-selling products might require a different kind of marketing strategy or perhaps a review of whether the commodity should be sold in the market.

2. Time Series Pattern of Revenue

The revenue trends line graphic shows seasonal revenue peaks and troughs. Sales may be higher during certain periods due to seasonal demand or specific promotional events, which can offer opportunities for targeted marketing during these periods. Declines in revenue may indicate opportunities for growth, such as overcoming off-season challenges with special offers or innovative marketing campaigns.

3. Regional Customer Demographics

The significant markets where most of the customers reside are depicted in the pie chart that indicates customer distribution by region. For instance, this knowledge can be used to effectively distribute resources by focusing on advertising and logistical activities in high-density regions. In addition, localized marketing can be employed to target regions with lower customer counts in order to expand the client base and revenue.

4. Product Category Transaction Value

The box plot for transaction value distribution across categories shows that premiumpriced categories have more variability in transaction value, which may suggest consumer segmentation. Budget-friendly product categories can focus on high-volume sales to drive growth, while luxury or specialized product categories may benefit from special promotions.

5. Customer Signup Trends

Through signup date histograms of customers, patterns in client acquisitions over time could be identified. Peaks in the signup curve correspond to successful new product launches and marketing campaigns-thus providing vital information about a proven

acquisition strategy-and there is even a chance of improving outreach campaigns such as electronic advertisements or referring schemes when people sign up relatively less.