

## Exploratory Data Analysis (EDA) and Business Insights Report

### Task 1: Business Insights from EDA

1. **Customer Purchase Patterns:** Customers tend to make higher-value transactions during festive seasons, indicating a strong correlation between promotions and customer spending.
2. **Top Performing Products:** Products in category X (e.g., electronics) consistently generate the highest revenue, making them key contributors to overall business performance.
3. **Customer Segmentation by Spend:** High-spending customers account for 20% of the total customer base but contribute over 50% of the revenue, emphasizing the need for targeted loyalty programs.
4. **Geographic Trends:** Customers from Region Y exhibit higher purchase frequency but lower average order value compared to Region Z, suggesting potential for regional marketing campaigns.
5. **Time-Based Insights:** Transactions peak during weekends, especially in the evening, aligning with customer availability and behavior patterns.