

# Client Requests

Create visuals and provide insights for the requested business questions below.

1. Visualize the number of stores in each city. Identify the city with the most stores and explain the distribution of stores across other cities. How does the number of stores in Bengaluru compare with those in Hyderabad and Chennai?  
(Hint: Use a **bar chart** to visualize the number of stores by city)
  
2. Analyze the total quantity sold after promotion for the Sankranti campaign across different product categories. What percentage does each category contribute to the overall sales, and what insights can be drawn from these contributions?  
(Hint: Use a **pie chart** to visualize percentage contribution of each category to the overall sales)
  
3. Examine the correlation between base price (after the promotion) and sales quantities (after the promotion). What insights can be drawn regarding the relationship between base price and sales quantities after the promotion?  
(Hint: Use **heatmap** to get the correlation)
  
4. Analyze the distribution of quantity sold before the promotion for each product category (Grocery & Staples, Home Care, Personal Care, Home Appliances, etc.). What patterns or trends do you observe across these categories, and how could these insights inform future promotional strategies?  
(Hint: Use individual **histograms** to visualize the distribution)
  
5. Analyze the incremental sold units percentage (ISU%) across various cities. Identify the city with the highest ISU% after the promotion and the city with the smallest change. What trends can be observed about the effectiveness of

promotions in driving sales across these cities?

(Hint: Use a **line chart** to visualize the ISU% comparison across cities)

6. Analyze the relationship between incremental revenue and incremental sold units for different promotion types in Hyderabad. Which promotion type led to the highest incremental sold units, and which one generated the highest incremental revenue? What insights can you draw from the balance between the two metrics for this city?

(Hint: Use a **scatter plot** to analyze the relationship)

7. Analyze the revenue before and after promotions across different product categories in Bengaluru. What trends can be identified in the performance of each category, and how did promotions impact overall revenue in the city?

(Hint: Use a **vertical bar chart** to compare the revenue before and after promotions)

#### Key Metrics:

- **IR% (Incremental Revenue):** IR% measures the percentage change in revenue after a promotion compared to the revenue before the promotion. It helps assess how effective a promotion was in driving revenue growth.
- **ISU% (Incremental Sold Units):** ISU% calculates the percentage change in the number of units sold after a promotion compared to the units sold before the promotion. It indicates the effectiveness of a promotion in boosting sales volume.