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**Introduction**

Imtiaz Super Market is one of the leading retail chains in Pakistan, known for its wide range of products, competitive prices, and exceptional customer service. Founded in 1955, Imtiaz Super Market has grown exponentially, establishing multiple branches across major cities in Pakistan. The retail chain offers a diverse selection of items, including groceries, electronics, clothing, furniture, and books, catering to the needs of a large and varied customer base. Imtiaz Super Market's commitment to quality and affordability has made it a household name, trusted by millions of customers nationwide.

**Purpose of Choosing Sales Data of Imtiaz Super Market**

For my university final project, I chose to analyze the sales data of Imtiaz Super Market for several compelling reasons:

1. \*\*Relevance and Impact\*\*: The retail industry plays a critical role in the economy, and analyzing the sales data of a leading chain like Imtiaz Super Market provides valuable insights into consumer behavior, market trends, and business performance.

2. \*\*Data Richness\*\*: The sales data from Imtiaz Super Market is extensive and detailed, covering various product categories, geographical locations, and time periods. This richness of data allows for comprehensive analysis and meaningful conclusions.

3. \*\*Practical Application\*\*: Understanding sales patterns and trends in the retail sector can have practical applications, such as improving inventory management, optimizing pricing strategies, and enhancing customer satisfaction. The findings from this project can provide actionable recommendations for Imtiaz Super Market.

4. \*\*Academic and Professional Growth\*\*: Working with real-world data from a prominent retailer enhances my analytical skills, proficiency in data visualization tools like Power BI, and ability to draw data-driven insights. This project not only contributes to my academic growth but also prepares me for professional challenges in the field of data analytics.

**Positive Response**

The analysis of Imtiaz Super Market's sales data has been an enlightening and rewarding experience. By delving into the sales figures, I have gained a deeper understanding of the dynamics of the retail industry and the factors influencing consumer purchasing decisions. The visualizations and insights generated through this project highlight the strengths and opportunities for Imtiaz Super Market, providing a foundation for strategic decision-making. I am confident that the knowledge and skills acquired during this project will be invaluable in my future career, and I am excited about the potential impact of my findings on the business practices of Imtiaz Super Market.

**Steps to Create These Visualizations in Power BI**

1. **Load Data**
   * Open Power BI Desktop.
   * Click on “Get Data” and import Excel file of ISM sales data .
   * Load the data into Power BI.
2. **Create Visualizations**
   * **Line Chart (Sum of Profit by Month)**
     + Drag the “Profit” field to the Values area.
     + Drag the “Month” field to the Axis area.
     + Select the Line Chart visualization.
   * **Bar Chart (Sum of Sales by Cities)**
     + Drag the “Sales” field to the Values area.
     + Drag the “City” field to the Axis area.
     + Select the Bar Chart visualization.
   * **Bar Chart (Sum of Profit by Cities)**
     + Drag the “Profit” field to the Values area.
     + Drag the “City” field to the Axis area.
     + Select the Bar Chart visualization.
   * **Pie Chart (Sum of Quantity by Category)**
     + Drag the “Quantity” field to the Values area.
     + Drag the “Category” field to the Legend area.
     + Select the Pie Chart visualization.
   * **Map Visualization (Sales and Profit by Cities)**
     + Drag the “City” field to the Location area.
     + Drag the “Sales” field to the Size area.
     + Drag the “Profit” field to the Color Saturation area.
     + Select the Map visualization.
   * **Stacked Bar Chart (Sum of Sales and Sum of Profit by Category)**
     + Drag the “Sales” field to the Values area.
     + Drag the “Profit” field to the Values area.
     + Drag the “Category” field to the Axis area.
     + Select the Stacked Bar Chart visualization.
   * **Cards (Sum of Profit and Sum of Sales)**
     + Drag the “Profit” field to the Values area and select the Card visualization.
     + Repeat the process for the “Sales” field.

**Explanation of the Graphs**

1. **Sum of Profit by Month (Line Chart)**
   * This line chart displays the sum of profit for each month. It helps in identifying trends and patterns in profitability over the year.
2. **Sum of Sales by Cities (Bar Chart)**
   * This bar chart shows the total sales in different cities. It provides a comparative view of sales performance across various locations.
3. **Sum of Profit by Cities (Bar Chart)**
   * This bar chart illustrates the sum of profit for each city. It helps in understanding which cities are the most profitable.
4. **Sum of Quantity by Category (Pie Chart)**
   * This pie chart breaks down the quantity of products sold by category. It gives a quick overview of the distribution of sales across different product categories.
5. **Map Visualization (Map)**
   * This map shows the geographical distribution of sales and profit by cities. It provides a spatial representation of performance.
6. **Sum of Sales and Sum of Profit by Category (Stacked Bar Chart)**
   * This stacked bar chart compares both sales and profit across different product categories. It provides insights into which categories are driving the most sales and profit.
7. **KPIs (Cards)**
   * The cards at the bottom display the overall sum of profit and sum of sales. These key performance indicators (KPIs) give a quick snapshot of the overall performance.

**Conclusion**

* **Profit Trends**: The line chart shows a fluctuating trend in profits over the year, indicating seasonal or cyclical variations.
* **City Performance**: Both bar charts for sales and profit highlight that certain cities, such as Hyderabad and Faisalabad, perform better in terms of sales and profitability.
* **Category Distribution**: The pie chart reveals a balanced distribution of product categories, with no single category overwhelmingly dominating the sales quantity.
* **Geographical Insights**: The map visualization provides a clear spatial distribution of sales and profit, indicating regional performance.
* **Category Comparison**: The stacked bar chart helps in comparing sales and profit across categories, showing which categories contribute more to sales versus profit.
* **Overall Performance**: The KPI cards at the bottom give a concise summary of the total profit and sales, providing a quick snapshot of overall business performance.