

## **1. What is the importance of data visualization?**

Data visualization is crucial because it helps in translating complex data into clear, visual insights that are easy to understand and act upon. It enables quick decision-making by highlighting patterns, trends, and outliers. For example, in my hospitality project, visualizations helped identify booking trends and revenue performance over time.

## **2. When do you use a pie chart vs bar chart?**

I use pie charts when I want to show proportion or percentage of a whole-like segment-wise sales contribution. However, I prefer bar charts when comparing multiple categories or values over time, like comparing monthly revenue or city-wise expenses, since bar charts are easier to interpret accurately.

## **3. How do you make visualizations more engaging?**

I make visuals engaging by using clean layouts, consistent color schemes, interactive elements like filters and slicers, and tooltips for detailed insights. In Power BI, I often use bookmarks and drill-through features to enhance user interaction.

## **4. What is data storytelling?**

Data storytelling is combining visuals, context, and narrative to communicate a compelling message or insight from data. In my finance dashboard, for example, I didn't just show numbers-I told the story of how expenses impacted profitability over time and highlighted areas needing cost control.

## **5. How do you avoid misleading visualizations?**

I ensure accuracy by using appropriate chart types, maintaining consistent scales, labeling clearly, and avoiding distortion. For instance, I never manipulate axis values to exaggerate trends, and I always validate data sources before building visuals.

## **6. What are best practices in dashboard design?**

Some best practices I follow include:

- Keeping it clean and focused on key KPIs
- Using grid layouts for consistency

- Adding interactivity like filters and slicers
- Ensuring readability with proper font sizes and contrast
- Prioritizing user experience by putting the most important visuals at the top

## **7. What tools have you used for visualization?**

I've worked with Power BI and Tableau for creating interactive dashboards and reports. I also use Excel (Pivot Charts, Conditional Formatting, and Macros) for quick analysis and visualization. In Power BI, I've worked with DAX and Power Query to transform data before visualizing.