# Indian Jewelry Sales Dashboard – Data Visualization Interview Report

## Importance of Data Visualization

Data visualization converts raw data into actionable insights. In the Indian Jewelry Sales project, visual tools like bar charts, KPIs, and slicers made it easy to understand sales performance across states, identify top-selling products, and analyze customer trends—without reading raw Excel data.

## Pie Chart vs Bar Chart Usage

- Pie Charts: Used to show the contribution of each product category to the total revenue.  
- Bar Charts: Used to compare sales across cities, months, or customer types.  
In this project, pie charts helped show sales share by category, while bar charts compared sales volume by location.

## Creating Engaging Visualizations

- Used interactive slicers for state and product filtering.  
- Applied conditional color formatting to highlight high/low sales.  
- Added dynamic tooltips and drilldowns for deeper exploration.  
All visuals were designed to let users find answers intuitively by interacting with the dashboard.

## Data Storytelling

Data storytelling is about guiding viewers through the data with a clear narrative.  
For example, a monthly trend line in the dashboard highlights peak seasons in jewelry sales, helping the business prepare better for those high-demand periods. It tells a story of seasonality and customer behavior.

## Avoiding Misleading Visualizations

- Used uniform axis scales for all comparison charts.  
- Avoided 3D or overly decorative charts that distort data.  
- Grouped minor categories to prevent clutter.  
- Made sure labels and legends were clear and readable.  
In Power BI, I kept the dashboard honest and clear by avoiding visual exaggeration.

## Dashboard Design Best Practices

- Top-level KPIs (Total Sales, Avg Transaction Value) are shown up front.  
- Charts grouped logically (Time, Product, Region).  
- Clean white background and consistent fonts used.  
- Applied minimalistic layout with good use of white space and grid alignment.  
These choices made the dashboard easy to understand at a glance.

## Tools Used for Visualization

I used:  
- Power BI for complete data cleaning, modeling, and dashboard creation.  
- Excel (optional in other projects) for raw data checks.  
This project was 100% executed in Power BI, showcasing my end-to-end skills in the tool.

## Data Cleaning in Power BI

All data cleaning steps were completed within Power BI using Power Query Editor:  
- Removed null rows and redundant columns  
- Changed data types appropriately  
- Handled missing values using replacement and filters  
- Ensured consistency and readiness for analysis

## Challenges and Solutions

- Incomplete data: Solved using filters and Power Query transformations  
- Dashboard layout complexity: Solved by grouping charts and using a grid-based clean layout  
These adjustments improved clarity and effectiveness of the dashboard.

## Key Insights from the Dashboard

- High-performing cities and states revealed by Top-N charts  
- Product-wise contribution highlighted peak-selling items  
- Monthly sales trend indicated festive buying patterns  
- B2C segments were identified as top revenue generators

## Why Power BI was Chosen

Power BI was selected for its all-in-one features:  
- Seamless data cleaning with Power Query  
- DAX for creating dynamic measures and KPIs  
- Clean UI for professional dashboards  
- Capability to publish and share reports interactively

Report Completed By: Kandukuri Jaswanth

Date: 24-06-2025