Instructions for Devyani: Visualizing Market Research Data

Objective: To effectively visualize and present the collected data from various stakeholders in a clear and dynamic format that can be updated daily.

Step-by-Step Approach:

1. **Identify Key Metrics and Data Points:**
   - Student responses
   - Company responses
   - Placement cell responses
   - Competitive analysis insights
   - KPIs (Growth, Research Accuracy, Research Timelines, Stakeholder Satisfaction, Innovation Index)

2. **Choose Appropriate Visualization Tools:**
   - **Microsoft Excel or Google Sheets** for basic charts and graphs.
   - **Looker Studio** for more advanced and interactive dashboards.
   - **Tableau** or **Power BI** for comprehensive and professional data visualization (if available).

3. **Create Visual Templates:**
   - **Daily Progress Charts:**
     - Line charts to show daily growth in student and company responses.
     - Bar charts to compare actual responses vs. target responses.
   - **KPI Dashboards:**
     - Gauge charts or bullet graphs to show performance against targets.
   - **Comparative Analysis:**
     - Bar or column charts for competitive analysis.
     - Heat maps for identifying trends and patterns.
   - **Stakeholder Satisfaction & Innovation Index:**
     - Pie charts or donut charts to represent satisfaction levels.
     - Simple count or bar chart for innovation methods used.

4. **Dynamic Data Integration:**
   - Set up a central data repository (like a Google Sheet or Excel file) where daily data can be updated.
   - Link this repository to your visualization tool to ensure real-time updates.

5. **Implementation Plan:**
   - **Data Collection:**
     - Continue collecting data daily as you have been.
     - Ensure data is entered into the central data repository.
   - **Visualization Creation:**
     - Use the chosen tools to create the initial set of charts and dashboards.
     - Set up automatic updates if using advanced tools like Looker Studio, Tableau, or Power BI.

- ○ **Daily Updates:**
  - ■ Update the central data repository with new findings daily.
  - ■ Review the visualizations to ensure they reflect the latest data.
- ○ **Reporting:**
  - ■ Incorporate the visualizations into your daily report.
  - ■ Highlight key insights and trends observed from the data.

6. **Example Visualization Plan:**

Line Chart for Growth Percentage:

```
A1: Date | B1: Student Growth (%) | C1: Company Growth (%)
A2: 10-06 | B2: 10% | C2: 15%
A3: 11-06 | B3: 17.56% | C3: 25%
```

- ○
  - ■ Create a line chart using columns A, B, and C.

Bar Chart for Actual vs. Target Responses:

```
A1: Category | B1: Actual Responses | C1: Target Responses
A2: Students | B2: 87 | C2: 60
A3: Companies | B3: 10 | C3: 10
A4: Placement Cells | B4: 2 | C4: 6
```

- ○
  - ■ Create a bar chart comparing columns B and C.

- ○ **KPI Dashboard:**
  - ■ Use gauges to show overall KPIs for students, companies, and placement cells.

7. **Continuous Improvement:**
   - ○ Regularly review the effectiveness of the visualizations.
   - ○ Gather feedback from stakeholders on the clarity and usefulness of the visual reports.
   - ○ Make adjustments as needed to improve comprehension and impact.

Implementation Example in Google Sheets:

1. **Create a Google Sheet** with the following tabs:
   - **Raw Data:** for daily data entry.
   - **Visualizations:** for creating charts and graphs.

2. **Set up Charts:**
   - Insert charts in the "Visualizations" tab linked to the data in the "Raw Data" tab.
   - Use the "Chart Editor" to customize the type of chart and data range.

3. **Embed Dashboard:**
   - If using Looker Studio, connect your Google Sheet and create an interactive dashboard.
   - Share the dashboard link with stakeholders for real-time access.