**📊 Project Summary – Data Professional Survey Dashboard**

**Tool Used**: Power BI  
**Dataset**: Survey responses from 504 data professionals  
**Objective**: To visualize and analyze key aspects of data professionals’ careers, including salary distribution, job satisfaction, demographics, and preferred programming languages, to gain actionable insights into the data industry landscape.

**🛠️ Key Features of the Dashboard:**

1. **Interactive Salary Analysis**:
   * Bar chart showing **Average Salary by Job Role**, helping to identify the most lucrative career paths.
   * Gender breakdown of salaries visualized using a **donut chart**.
2. **Demographic Breakdown**:
   * **Pie chart** shows distribution of respondents by country, with the US, India, and UK being major contributors.
   * **Average age** of respondents displayed as a KPI card.
   * **Gender split** visualized using a donut chart.
3. **Job Satisfaction Metrics**:
   * **Gauge charts** show average scores for:
     + **Happiness with Salary**: 4.26/10
     + **Happiness with Work-Life Balance**: 5.72/10
4. **Technology Preference**:
   * **Stacked bar chart** shows the count of favorite programming languages, categorized by:
     + Python, R, C/C++, JavaScript, Java, and Others.
5. **Overall KPIs**:
   * **Total Respondents**: 504
   * **Average Age**: 29.89 years

**🔍 Key Insights Derived:**

1. **Top Paying Roles**:
   * **Data Scientists** have the highest average salary (95 units), followed by **Data Engineers** (67).
   * Entry-level or student respondents reported the lowest average salary (29).
2. **Geographic Distribution**:
   * The **United States** has the highest number of respondents (43.45%).
   * India and “Other” countries make up a significant share, showing global diversity in data professionals.
3. **Programming Language Preferences**:
   * **Python** dominates as the most preferred language (203 votes), followed by R, C/C++, and JavaScript.
   * This insight highlights the importance of Python in the current data landscape.
4. **Work-Life Balance vs. Salary Satisfaction**:
   * Despite high-paying jobs, **happiness with salary** is rated low (4.26), while **work-life balance** scores relatively better (5.72).
   * Indicates a potential misalignment between compensation and expectations or job pressure.
5. **Gender Representation**:
   * Respondents are nearly evenly split between male (50.67%) and female (49.33%), indicating balanced participation in the survey.

**✅ Skills Demonstrated:**

* Data cleaning and transformation using Power Query.
* Designing **user-friendly dashboards** with appropriate charts and KPIs.
* Applying **data modeling** concepts and creating insightful **visual stories**.
* Utilizing **filters, slicers, and calculated columns/measures** to enhance interactivity and analytical depth.