DATA PROFESSIONAL SURVEY BREAKDOWN

**Overview:** In this Power BI project, I worked on analyzing survey data from data professionals to gain deeper insights into their roles, satisfaction levels, and demographic distribution. The dashboard I created is designed to offer a clear and interactive overview of key factors that influence the lives of data professionals, such as job satisfaction, salary, work-life balance, and the challenges they face in their careers.

**Dataset:** The dataset included various fields capturing survey responses, such as job roles, salary, gender, country of residence, industry, education level, and job satisfaction metrics. Some specific fields were:

* Job Title
* Current Yearly Salary
* Industry
* Favorite Programming Language
* Happiness with Salary and Work-Life Balance
* Gender
* Country
* Highest Level of Education

This dataset provided a comprehensive view of the current state of data professionals and their perspectives on their jobs.

**Charts Created:**

1. Happiness Gauges: I created gauges to visualize job satisfaction related to salary (4.7 out of 10) and work-life balance (5.74 out of 10). This allows users to see at a glance how content data professionals are with these key aspects of their jobs.
2. Geographical Distribution Treemap: This visual breaks down the respondents by country, highlighting the global nature of the data profession with a focus on countries like the USA, India, Canada, and the UK.
3. Job Titles Clustered Bar Chart: Here, I visualized the distribution of job titles among respondents, showing the prevalence of roles like Data Scientist, Data Engineer, and Data Architect.
4. Average Salary by Gender Donut Chart: This chart shows the breakdown of average salaries by gender. Interestingly, the data shows a slight imbalance, with females earning slightly more on average than males (50.8% vs. 49.2%).

**Dashboard:** The dashboard offers interactive elements that allow users to dive deeper into the data. Users can filter and explore the dataset, gaining insights into various demographic and job satisfaction-related metrics.

**Key Findings:**

1. Job Satisfaction: The average job satisfaction scores indicate that while data professionals are moderately happy with their work-life balance (5.74 out of 10), they are less satisfied with their salary (4.7 out of 10).
2. Geographical Distribution: The majority of survey participants are from the USA, followed by India, Canada, and the UK, showing strong global participation.
3. Job Titles: Data Scientist and Data Engineer roles are the most common, underscoring the technical nature of the data profession.
4. Gender Pay Gap: A slight gender imbalance was identified, with females earning slightly more on average than males, which is noteworthy considering traditional pay gap issues.
5. Difficulty in Entering the Field: Responses showed a mixed experience, with some finding it easy to enter the data field while others found it challenging. This highlights the varied paths people take into data careers.
6. Factors Influencing Job Search: The most important factor for respondents when seeking new jobs varies, providing insights into what data professionals value most when considering career moves.

**Conclusion:** This project showcases how Power BI can be used to provide actionable insights into the data profession. The interactive visualizations allow for a deeper understanding of job satisfaction, demographics, and the challenges faced by data professionals. This dashboard can be valuable for companies looking to recruit or retain data professionals by aligning their offerings with what professionals value most.

**Future Enhancements:** I plan to add further analysis based on industry specifics and experience levels to see how these factors impact job satisfaction and salary. Additionally, I want to incorporate predictive analytics to forecast trends in job satisfaction and salary over time, helping companies stay ahead of market shifts.