**Excel & Power BI Project: Data Professionals Survey Analysis.**

**Introduction:**

This Project involves an analysis of a survey taken by Data professionals. The raw data, available for free on GitHub, was sourced from a real survey conducted by Alex the Analyst. The dataset includes responses from professionals in various data-related fields such as Data Scientists, Data Analysts, Data Engineers, Data Architects, etc. The analysis aims to provide insights that can help others, particularly those considering a switch into the data field, to gain a deeper understanding of the industry.

**Here are the Key Questions I was interested in answering:**

* What is the average salary for different Job roles in Data?
* What is the favorite Programming language used by Data professionals?
* Which countries do these Professionals reside in and how much do they earn in these Countries?
* How satisfied are they with their work-life balance?
* How satisfied are these Professionals with their Salaries?
* How difficult is it to break into the Data field?

**I took the following steps to create my Analysis:**

1. **Data Cleaning in Excel:**

Removed duplicates.

1. **Data Transfer to Power BI:**

Imported the cleaned data to Power BI for further cleaning using the Power Query Editor.

1. **Data Preparation in Power BI:**

* Deleted unwanted columns using the Remove Columns function.
* Corrected errors and standardized data to match the required data type and format for visualization.

1. **Data Analysis:**

* Used DAX to perform calculations, such as computing the average salary.

1. **Visualization:**

* Created various visualizations including Clustered Bar Chart, Stacked Column Chart, Donut Chart, Tree Map, Cards, and Gauges.
* Designed an interactive dashboard with these visualizations.

1. **Formatting and Styling:**

* Renamed titles, sorted data, and applied appropriate fonts and colors to enhance the visual appeal of the dashboard.

**Here are my Observations and Insights:**

* 1. **Salary Insights:**

Data Scientists earn the most among the surveyed professionals.

* 1. **Programming Language Preferences:**

Python is the favorite programming language across all data professions, while Java is the least favorite.

* 1. **Geographical Distribution:**

Most of the data professionals surveyed reside in the United States.

* 1. **Work-Life Balance:**

More than half (57.4%) of the professionals are happy with their work-life balance, indicating that many data professionals find a good balance between work and personal life.

* 1. **Salary Satisfaction:**

Only 42.7% of the professionals are satisfied with their salaries, suggesting that a significant portion of data professionals are dissatisfied with their compensation.

* 1. **Difficulty of Entering the Field:**

For most respondents, the difficulty level of switching to a data career is moderate, indicating that it is neither too easy nor too difficult to break into the field.

* 1. **Survey Participation:**

A total of 630 data professionals participated in the survey.

**Interactive Dashboard**

The dashboard is highly interactive, allowing users to filter data and gain various insights. The Tree Map, for example, can be used to filter information by country, answering multiple questions and providing deeper insights into the survey data.

Thank you.

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