Jobs in Data Project

**Introduction**

In the era of tech, and there are a lot of jobs available in this industry. The demand for professions in field of Data, be it data analysis, data engineering, data science are on the rise. Jobs in data are expected to reach about 1 million in 2030. Therefore, the need for data professionals will be, and is on the rise already.

This dataset contains a survey conducted by a research team. It contains answers that data professionals gave in the survey. The survey contained questions about what the data professionals will look for in the field if they were to look for new jobs in data today; their salary range; their current roles; and other necessary questions.

**Tools**

The tool used for this project is Microsoft Excel. This tool is a powerful spreadsheet application for analysis and data manipulation. With strong features like power query and pivot tables, it makes data analysis easier and powerful.

***Cleaning process***

I started the analysis process by cleaning the data and ridding the data off unwanted and unused columns. I began by getting used to the data. After getting familiar with the dataset, I proceeded to removing blank columns, and there 5 columns namely, country, email, os, browser. These columns were empty and had no real data that could prove valuable to the analysis.

There were no duplicate values in the data. But some columns were not in their right data types so I fixed that. The cleaning process took a while but after cleaning the total number of columns reduced to 22.

***Insights***

1. **How many People took the survey?**

A total of 630 data professionals took the survey conducted.

1. **When did the survey start, date and time the survey was first taken, and last taken?**

The survey started 10th June 2022, and ended June 26th, 2022. On the first day there were 347 survey takers, the highest, and only 1 one person on the last day.

1. **Which job role had the highest number taking the survey?**

Data Analysts took more surveys than any other roles. 381 people took the surveys. The least were Data Architects, only 3 took the survey. Maybe it did not reach enough data architects. Students were the second highest with 90 survey takers.

1. **How many people switched profession into data?**

Of the total survey takers, 372 people switched careers into Data. That is 59% of the survey takers. This shows how a lot of people are switching careers into data with the increasing demand in tech and data.

1. **How many people found it difficult to break into Data?**

147 people neither found it difficult nor easy, whiles 106 people found it difficult to break into data. Only 17 found it very easy to break into data. 30 found it very difficult, and 72 found it Easy. The journey to data is sophisticated and has its challenges along the way.

1. **How many people switched roles to become the respective roles?**

Out of the 381 people that were data analysts, 246 switched careers to become analysts. 65% of the data analysts that took the survey were from other professions and switched into data. 2 switched to become data architects. Of the students and those looking for opportunities, 45 people switched into this profession.

1. **What is the average salary range for each role?**

The average salary for a data analyst is 50,061.68. The highest paid is a data scientist, The average salary is 86,620.00. Database Developers were the least, partly because only a few of them took the survey. Data Architects earn an average of 63,667.00

1. **What is the average salary for the various industries?**

According the data gathered from the survey, the Healthcare industry had the highest average salary with 59,654.76. The least is Telecommunication with 33,750.00.

1. **Which programming language was most preferred?**

Python was the most preferred programming language, 420 people liked Python, and 255 of them are Data Analysts. 101 preferred R. Java being 1.

1. **What was most important to the survey takers if they were taking a new job today?**

297 people would look for Better Salary, 117 Good Work/Life Balance, 127 are on the look for Remote work. A majority of 47% of the total surveyors stated that they will be looking out for better salaries if they were looking for a job today. A low 5% had other reasons, whereas 20% will seek for remote work, and 19% seeking for good work/life balance, and 9% looking for a good company culture.

1. **What is the gender distribution of the survey takers?**

Of the overall 630 participants, 468 of the survey takers were males contributing 74.29%, and 162 were female25.71%.

1. **What is the maximum age, minimum age, average age?**

The maximum age for the participants is 92. That is very old. Was it a mistake? It doesn't really affect the data so it's okay. The Minimum was 18. With an overall average age of 30.

1. **Which countries did most live in?**

Among the 5 available options. Other countries had 224 people take the survey. 261 people lived in United States, 73 in India, 40 in United Kingdom, and 32 from Canada.

1. **What is the highest level of education for our survey takers?**

Majority of the participants had Bachelor’s degree. The least was PHD holders. 52 people did not state what level of education they have, so it is assumed they do not have any yet.

1. **What is the average salary of various level of education holders?**

With only 5 participants, PhD holders earned an average of 115,300.00 salary per annum, the highest. Twice the salary of other education levels. Masters’ holders earned 55,302.08. Followed by Bachelors’ degree holders with an average salary of 42,661. Participants with no Educational Level earned a high 55,865.00. Associates and High School certificate holders earn an average salary of below 40,000.00.

1. **Which ethnicity are in data more?**

From the survey, 239 people are white or Caucasians. 4 people are American Indian, and 2 others are Native Hawaiians in the pacific. Asians had the second highest number with 155 people undertaking the survey, and 101 participants Black or African Americans.