Varun Chhetri - Task 2 Blog 2

Varun Chhetri

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Blog 2: Layoffs 2020-2023

Tool – Python

2.1 Dataset:

https://layoffs.fyi/

2.2 Data Description:

The given dataset has 12 columns and 2553 rows.

Company - Names of the company.

Location_HQ - Location of the headquarters in the city.

Laid_Off_Count - Number of employees laid off.

Percentage - Percentage of employees laid off from the company.

Source - Source of information.

Funds_Raised - Fund raised by the company.

Stage - Stage of the company.

Date_Added - Date of the source added.

Country - Country of the belonging company.

2.3 Data Cleaning and Preparation:

Before loading the data, a few libraries like – matplotlib, pandas, plotly and Seaborn were imported. Pandas are used to convert the imported data into Data Frame. This allows the data to be arranged in rows and columns with their respective data points. It provides a variety of

commands which can make the data cleaning and interpretation process easier and faster than other tools. Matplotlib and plotly are used for data visualisation as they can create a range of graphs. They provide great customisation features to make the visualisation more attractive and interactive at the same time. The most significant advantage of these libraries is that they are well-configured with each other.

2.4 Data Story:

In 2020, the world faced was struck by the pandemic. It caused widespread economic disruption and job losses across the world. The measures taken to control its spread, such as lockdowns and social distancing, certainly affected many industries. As businesses were forced to close or reduce their operations, many were unable to sustain their workforce and were forced to lay off their employees. Furthermore, the pandemic has caused a decline in consumer demand for goods and services, reducing revenue and profits for many businesses. This resulted in cost-cutting measures like reducing the number of employees and hiring very few people. The COVID-19 pandemic has caused a significant increase in layoffs and job losses, especially after a year or so. Currently, the job market is very volatile, and job security is very low. The full extent of the pandemic is still unfolding, and it is uncertain how long the recovery will take.

2.5 Data Visualisation and Analysis:

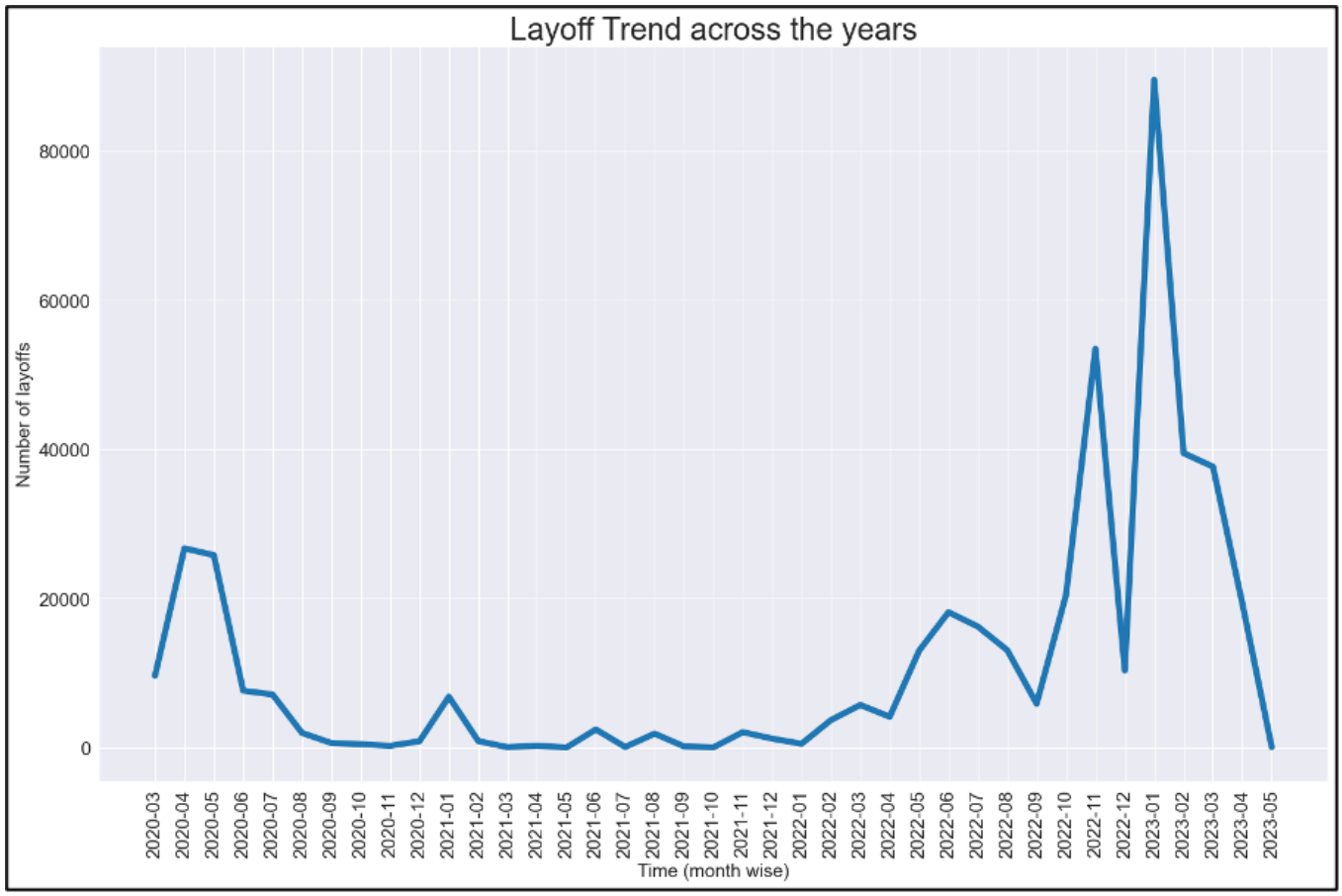

Fig 2.5.1: Total number of layoffs from March 2020 to May 2025.

The given line graph shows us that the layoff count rose during the start of the pandemic and then decreased over time, but the count started to show an increase by the end of 2022 and achieved an all-time of more than eighty thousand people being laid off in Jan 2023. This can indicate that it could possibly be the after-effects of the pandemic and the excessive hiring done during the pandemic to keep the businesses running.

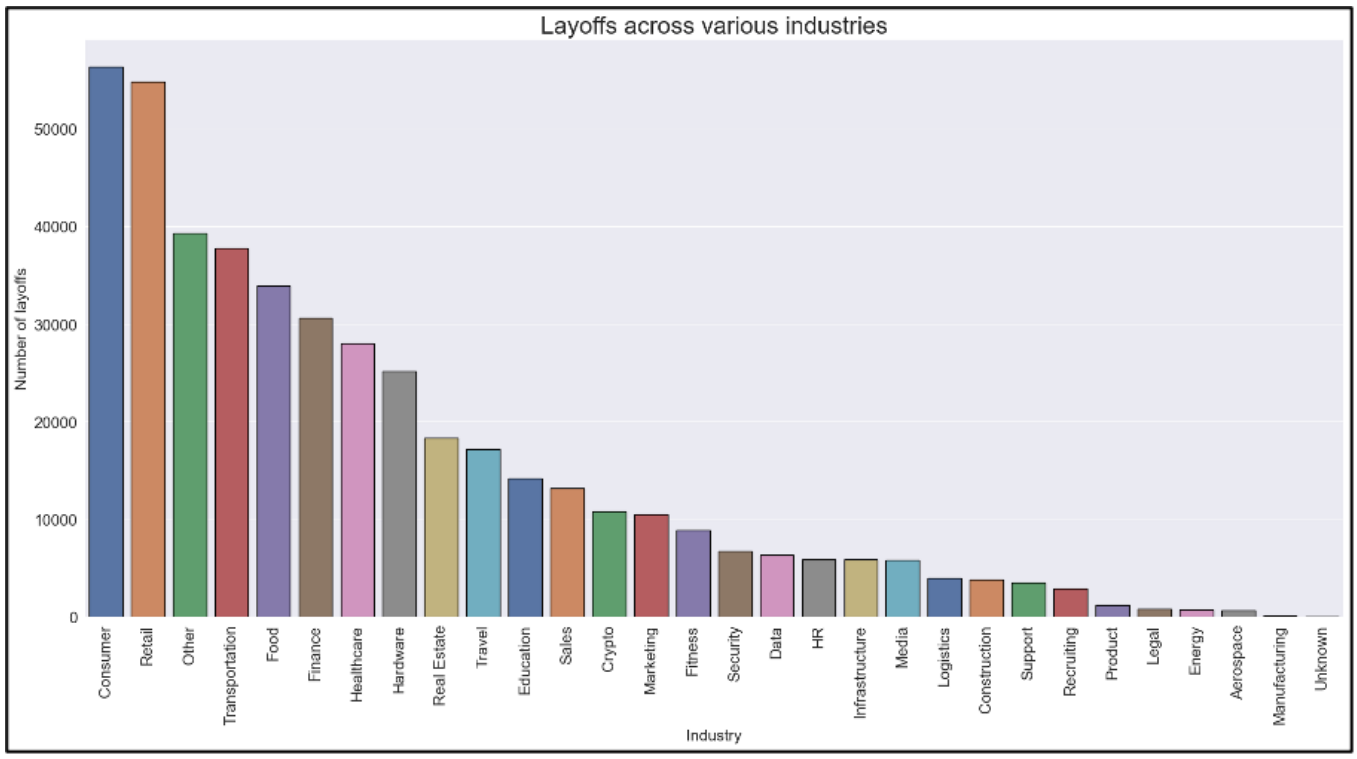

Fig 2.5.2: The total number of layoffs across the different sectors.

The highest number of layoffs was in the consumer sectors, closely followed by retail, suggesting it were the most hard-hit industries during this period. This could be due to several factors, such as increased competition, changing consumer preferences, and the rise of e-commerce. During these times, the retailers were also forced to reduce their operations due to social distancing and lockdowns. The least affected sectors were energy, aerospace and manufacturing.

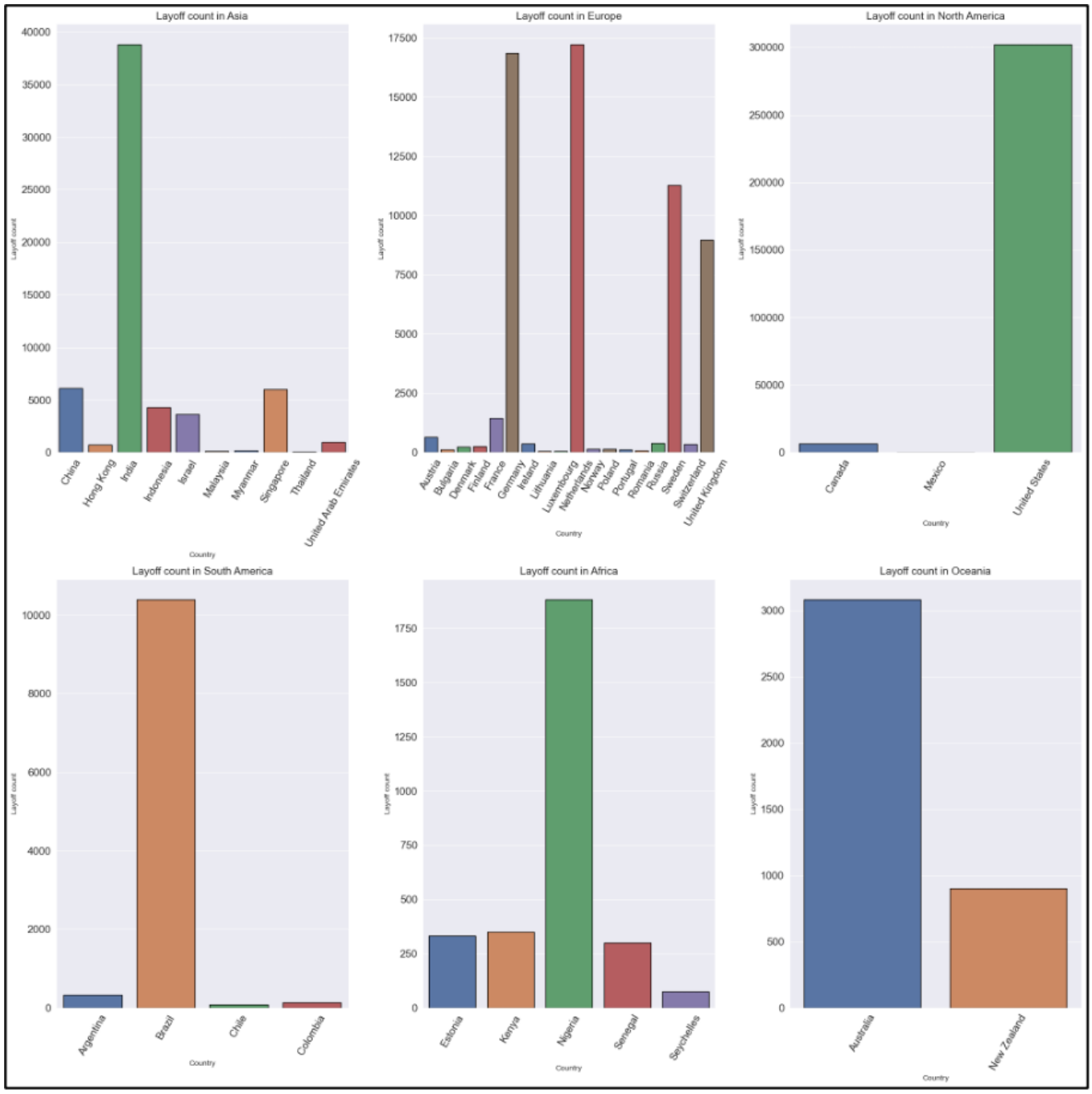

Fig 2.5.3: Total number of layoffs among different countries and across different continents

The bar graph shows the total number of employees laid off in different countries. In the Asian subcontinent, the maximum layoffs were in India, followed by Singapore and China. In Europe,

Luxembourg ranked highest in the maximum number of layoffs, followed by Germany, Sweden and the United Kingdom. The United States and Brazil ranked first in the respective continents with the maximum number of layoffs. In the African and Oceania region, the layoff count was the least among all the countries.

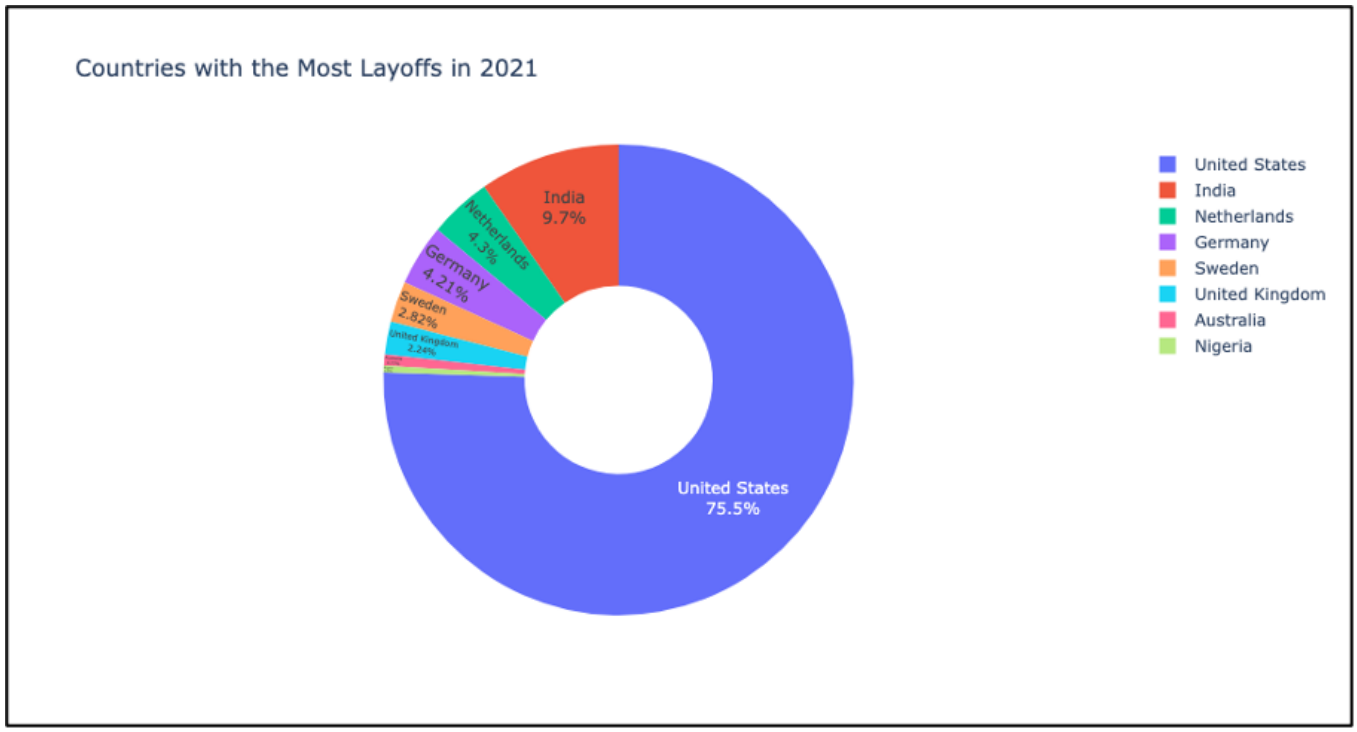

Fig 2.5.4: The countries with the most number of Layoffs.

The maximum number of layoffs were from the United States, suggesting it was one of the most hard-hit countries during those times. Its impact was such that it could cause significant economic disruption and job losses worldwide. The US has one of the largest and most diverse industries. This downturn means they could have faced many industry-specific challenges, which could directly impact the employment rate, resulting in high unemployment.

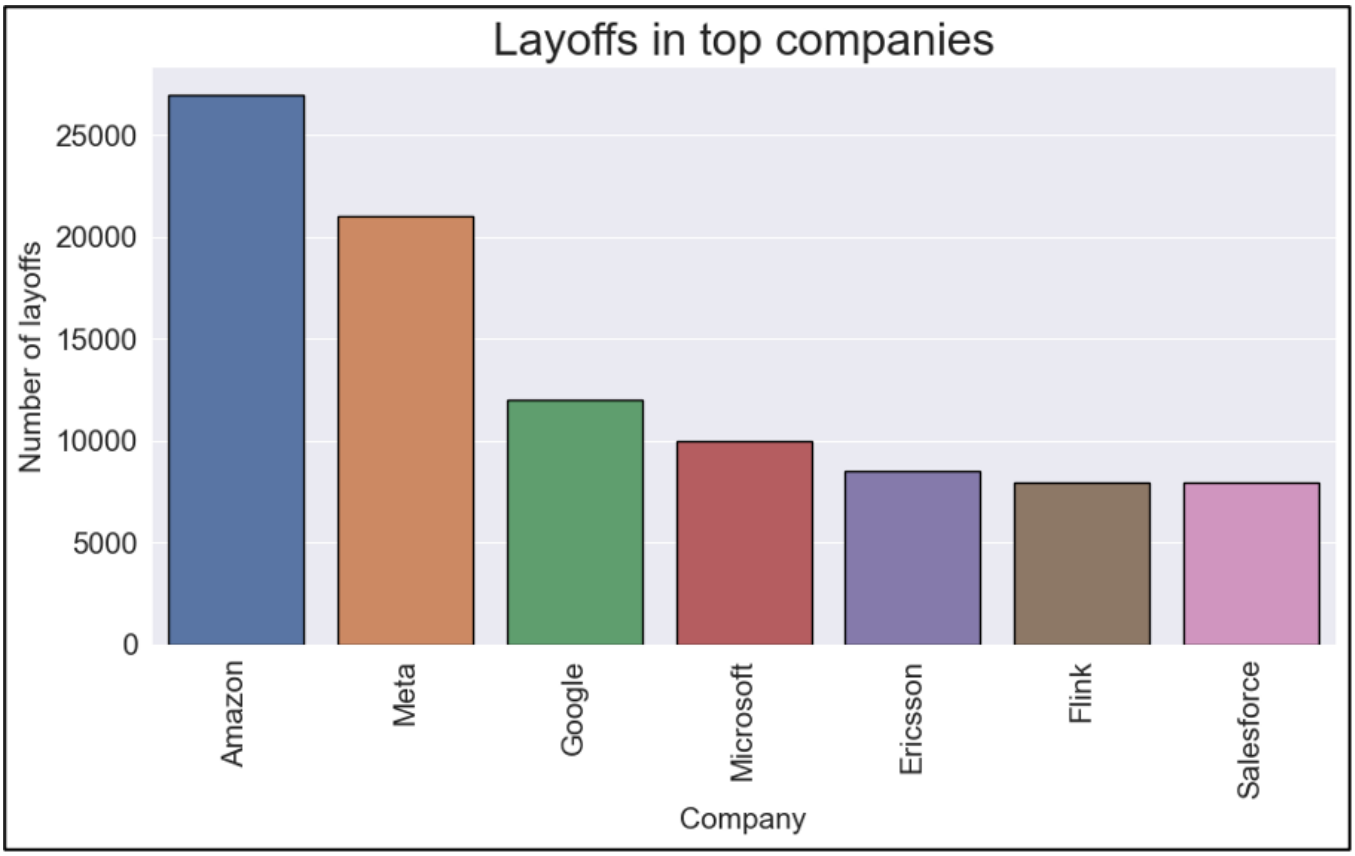

Fig 2.5.5: Total number of employees laid off among the top tech companies.

The maximum number of layoffs was from Amazon, with nearly 25000 employees removed from the company, followed by Meta, Google and Microsoft. Despite these companies being well-established, with high success rates and market dominance, they still struggled to sustain themselves in these circumstances. They were forced to reduce their workforce in such economic circumstances. Overall this highlights the volatility and competitiveness of the technology industry and emphasises the importance of being competitive and sustainable over the long term.

2.6 Conclusion:

In conclusion, the analysed dataset provides insights into the recent trends and patterns in workforce reduction. It also suggests that layoffs have been widespread across various industries and geographies, affecting even large and well-established companies. While the pandemic has significantly driven layoffs, other factors such as economic downturns, industry-specific challenges, and shifting business priorities have also contributed to workforce reductions. Therefore, businesses must remain agile and adaptable to navigate the volatile and competitive business environment and ensure long-term sustainability.

2.7 References:

[1] *Layoffs Dataset 2023*. (2023, May 3). Kaggle. https://www.kaggle.com/datasets/theakhilb/layoffs-data-2022

[2] *TechCrunch is part of the Yahoo family of brands*. (2022, May 6). https://techcrunch.com/2022/05/06/startup-tech-layoffs-in-may/

[3] Karaian, J., & Kelley, L. (2023, January 21). How Big Tech Layoffs Stack Up With the Rest of Their Work Forces. *The New York Times*. https://www.nytimes.com/2023/01/21/business/tech-layoffs.html

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Hey Varun

The analysed dataset offers insights very deep current trends and patterns in workforce reduction. suggests that layoffs have occurred frequently across a range of industries and regions, affecting even big, established businesses. While the pandemic played a large role in the workforce reductions, other elements like economic downturns, difficulties unique to certain industries, and shifting business priorities also played a role.

You present and visualise the data in a very technical manner. The selection of charts also aids readers in comprehending the trends and conclusions you're attempting to draw. Although this is a fascinating subject, it might make the article more interesting to read if you focused more on how the readers might benefit from your findings.

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May 7, 2023

I provided feedback on the blog posts of my two peers:

- ***Joseph Reddy Salibindla*** **-** https://canvas.uts.edu.au/courses/26199/discussion_topics/378360 (https://canvas.uts.edu.au/courses/26199/discussion_topics/378360)
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