World Layoffs

AN ANALYSIS OF GLOBAL LAYOFFS BETWEEN 2020-2023.

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PROJECT OVERVIEW

This project analyzes global layoffs across various industries and companies. The data highlights the impact of layoffs on employees, companies, and industries. The main goals are to:

- Identify trends in layoffs across time, regions, and industries.
- Quantify the severity of layoffs and understand their correlation with factors such as funding stage.
- Provide actionable insights through visualizations and statistical analyses.

DATA CLEANING

The data cleaning process involved the following steps:

- 1. Removing Duplicates: A staging table was created, and duplicate records were removed to maintain data integrity.
- 2. <u>Handling Null Values:</u> Key columns such as *total_laid_off* and *industry* were carefully imputed or cleaned to avoid skewing analyses.
- 3. <u>Standardization</u>: Date formats and text columns were standardized for consistency.
- 4. Column Selection: Unnecessary columns were dropped for a cleaner dataset.

EXPLORATORY DATA ANALYSIS (EDA)

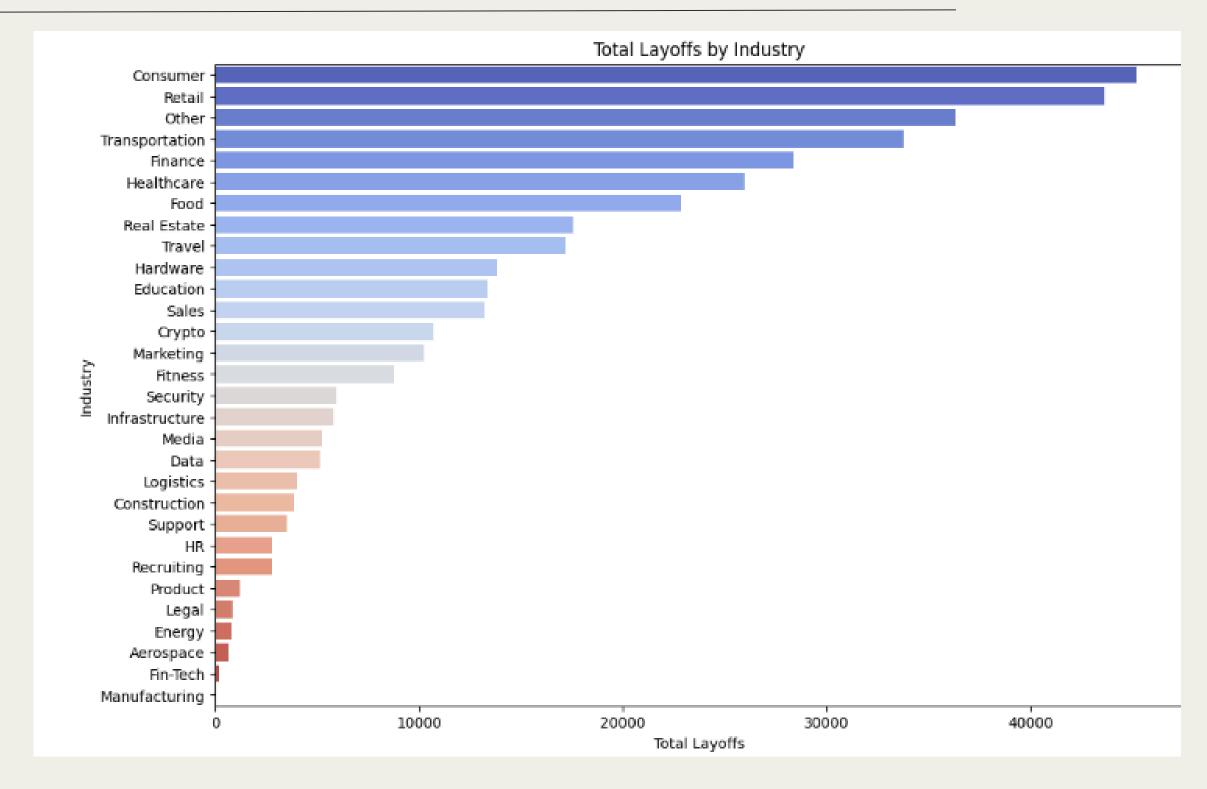
The EDA process included the following:

- 1. Data Loading:
- The layoffs_staging2.csv cleaned dataset was used.
- 2. Layoffs By Industry:
 - Correlation between industry and total_laid_off.
- 3. Trends in Layoffs over Time:
 - Layoffs By Month.
 - Layoffs By Year.
- 4. Layoffs By Stage of Funding:
 - Correlation between stage and total_laid_off.

- 5. Countries with the Most Layoffs
 - Correlation between country and total_laid_off
- 6. Additional Insights:
 - Companies with 100% layoffs were identified.
 - Top companies with the highest total layoffs were listed.

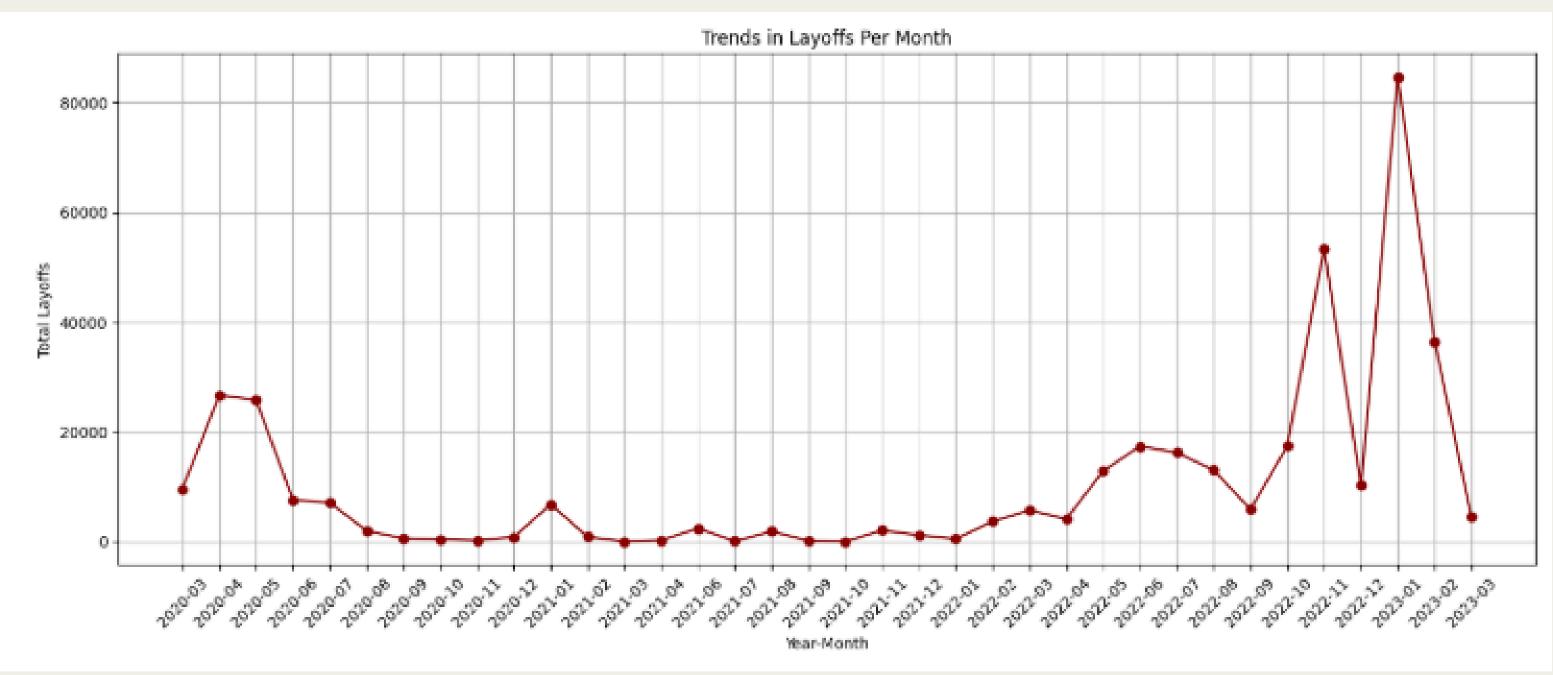
Key Insights

LAYOFFS BY INDUSTRY



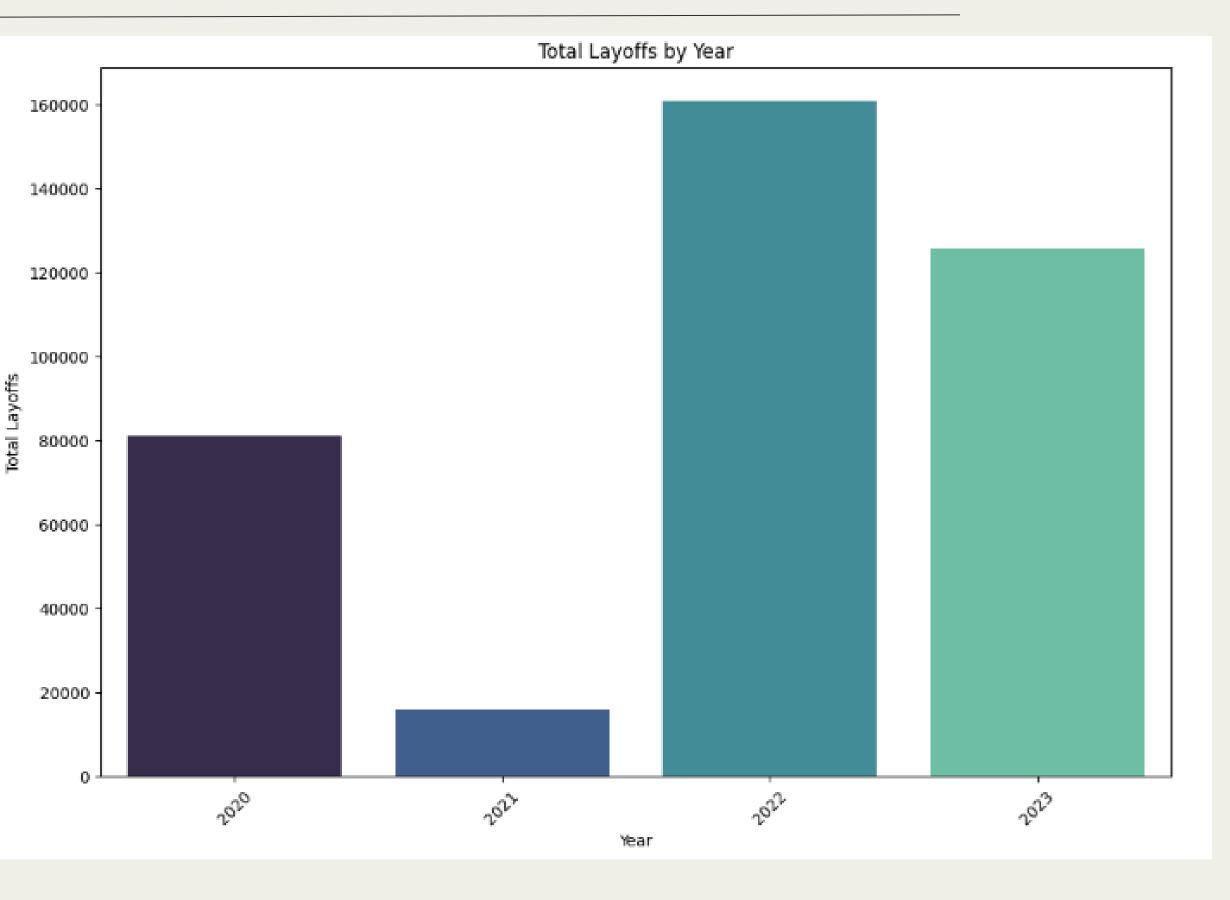
 Industries like Consumer and Retail experienced the highest number of layoffs, whereas
 Fin-tech and Manufacturing
 were among those that experienced the least.

TRENDS IN LAYOFFS OVER TIME (MONTHLY)



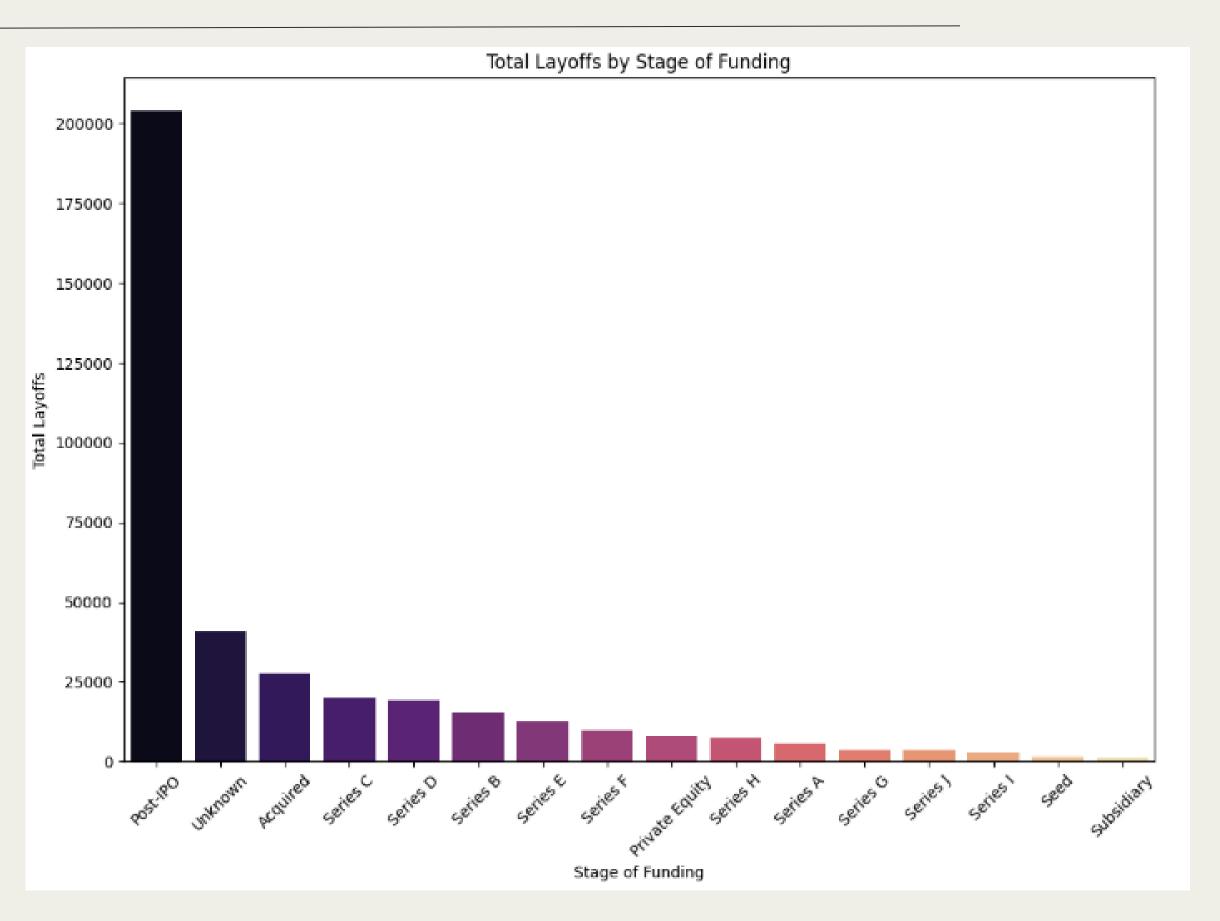
• Trends in layoffs show a spike in **early 2020**, just around the time the **COVID-19 pandemic** started, and later on toward the **end of 2022 and early 2023**, with the peak month for layoffs coming in **January 2023**.

TRENDS IN LAYOFFS OVER TIME (YEARLY)



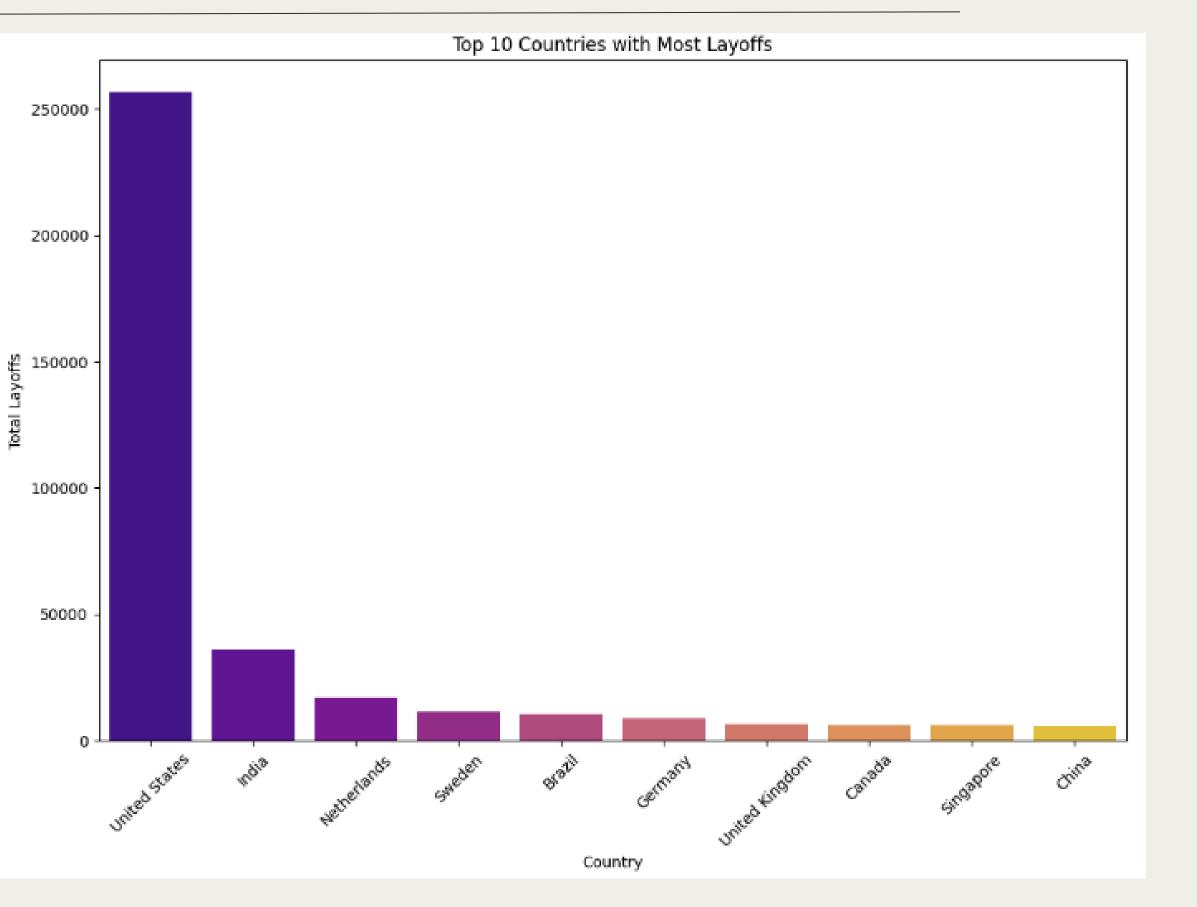
Yearly, 2022 had the highest layoffs, with 2023 coming as a close second, even though it only factors in 3 months of data! This could indicate that 2023 is well on its way to surpass the previous year in the amount of layoffs.

LAYOFFS BY STAGE OF FUNDING



Companies at the Post-IPO
 stage of funding experienced a
 significant amount of layoffs,
 showing vulnerabilities for
 companies at this stage, with
 other stages experiencing
 relatively moderate layoffs in
 comparison.

COUNTRIES WITH THE MOST LAYOFFS



 Layoffs were concentrated in countries like United States and India, with significant layoffs recorded in the U.S compared to other countries.

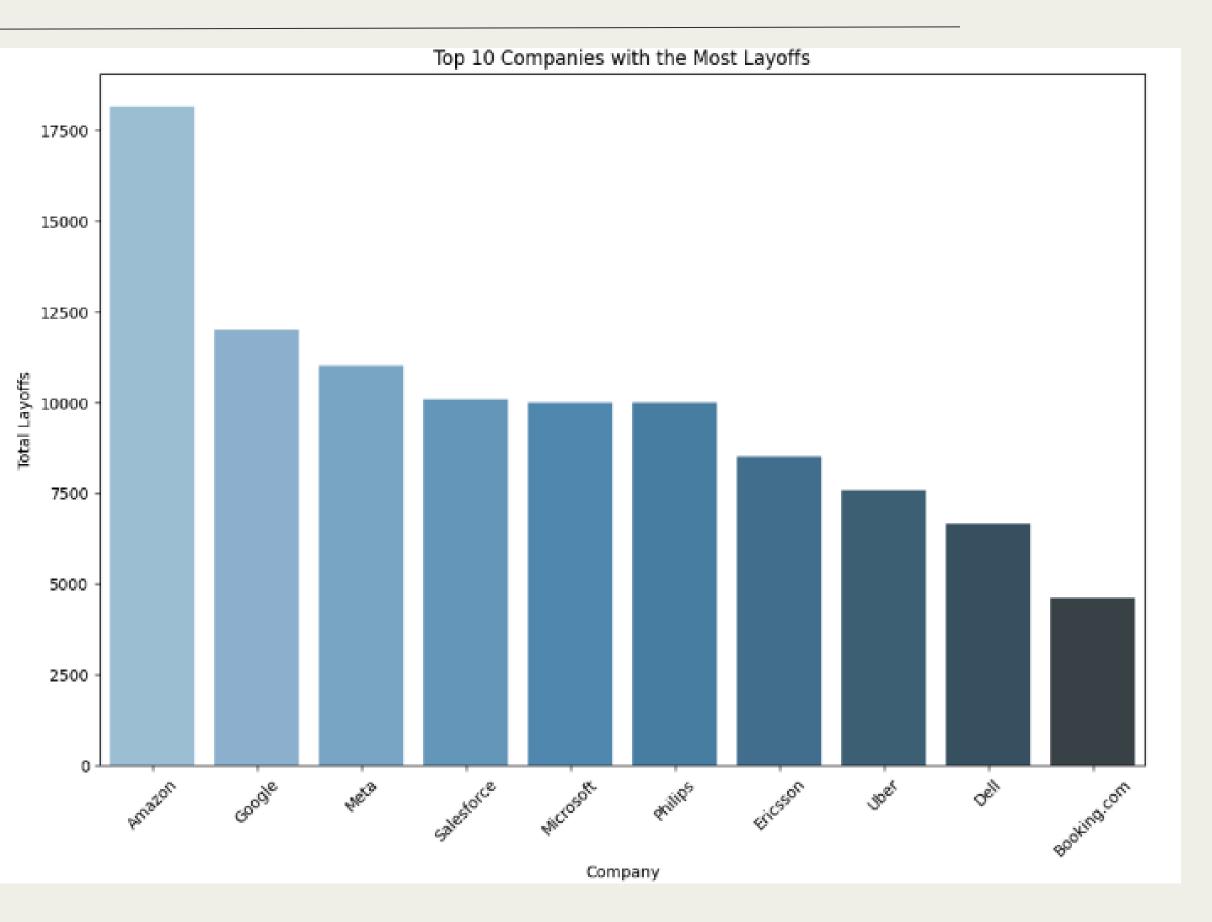
Additional Analysis

COMPANIES WITH 100% LAYOFFS



Companies with 100% layoffs
were identified as shown by the
WordCloud. There were 116
companies that went out of
business during this period

COMPANIES WITH THE MOST TOTAL LAYOFFS



 Among companies that didn't go out of business, Amazon led with the highest total layoffs, with Google coming in at a slightly distant second.

Recommendations

- **Support Vulnerable Sectors**: Focus on providing support and funding to industries most affected by layoffs, especially during economic downturns.
- Monitor Company Funding Stages: Monitor companies at specific funding stages for early signs of mass layoffs. Especially companies at the Post-IPO stage.
- **Geographic Focus:** Policymakers should provide region-specific support, especially in countries with high layoff rates.
- Improve Data Collection: More granular data on employee roles and layoff reasons can enhance predictive models for future workforce planning.

Thank you!

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