

# Layoffs 2020-2023



US study from 2020 to 2023

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# Questions & Hypothesis

1. Did the recent layoffs primarily affect the US and not other countries?

Hypothesis: Yes, only in the US due to economic downturn.

2. Which year witnessed the highest number of layoffs?

Hypothesis: 2020 (COVID-19 Pandemic).

3. What industries have experienced the highest number of layoffs globally?

Hypothesis: Hospitality, tourism, IT due to COVID-19 and economic downturn.

4. Which company has had the most layoffs?

Hypothesis: General Electric (GE), IBM, Walmart

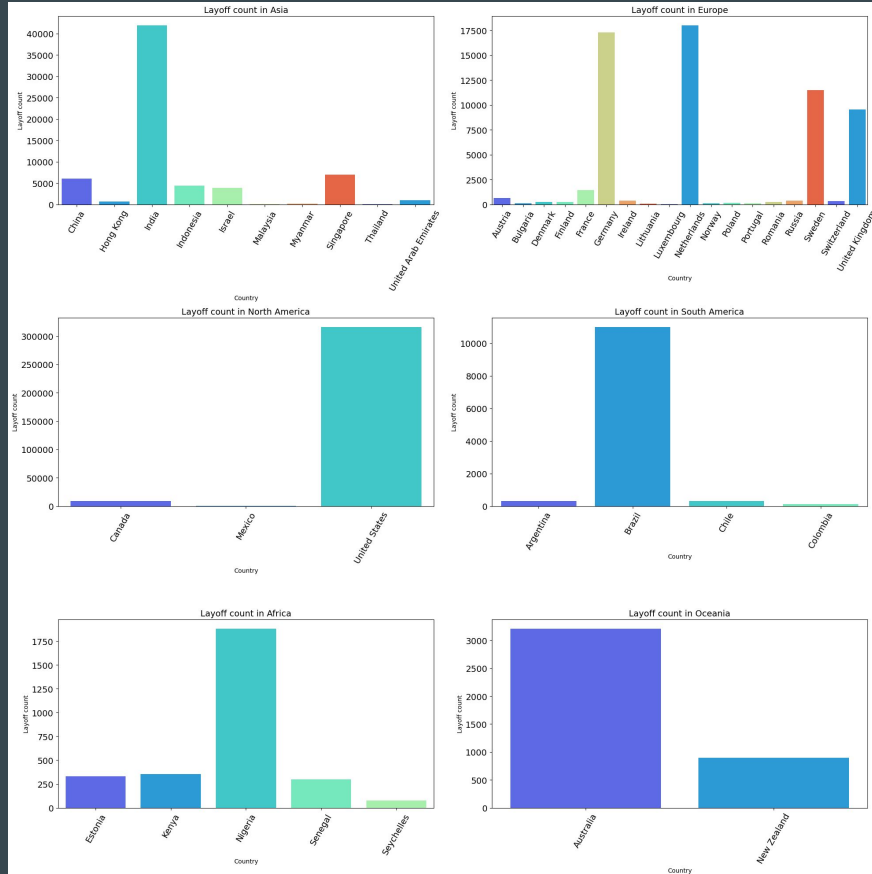
# Approach and Analysis

1. Data downloaded from Layoffs.fyi (Primary data source)
2. Compiled in one single sheet and cleaned the data, formatted the cells, and removed the unnecessary columns like 'Source', 'List\_of\_Employees\_Laid\_Offs', drop rows with count NAN, add year\_of\_laidoff column
3. The columns Company, year\_of\_laidoff, Industry, Date, Fund\_Raised, Laid\_off\_Count will be considered to answer our questions.
4. Statistical inference and graphical visualization will be employed.

# Technical Challenges

1. The dataset being clean enough, I remove missing values so they won't be considered.
2. Problem with the 'Date' field: data is collected not only in 2023 but also from 2020 to 2023 so data will have to put separately.

# Q1. Number of Layoffs in each country

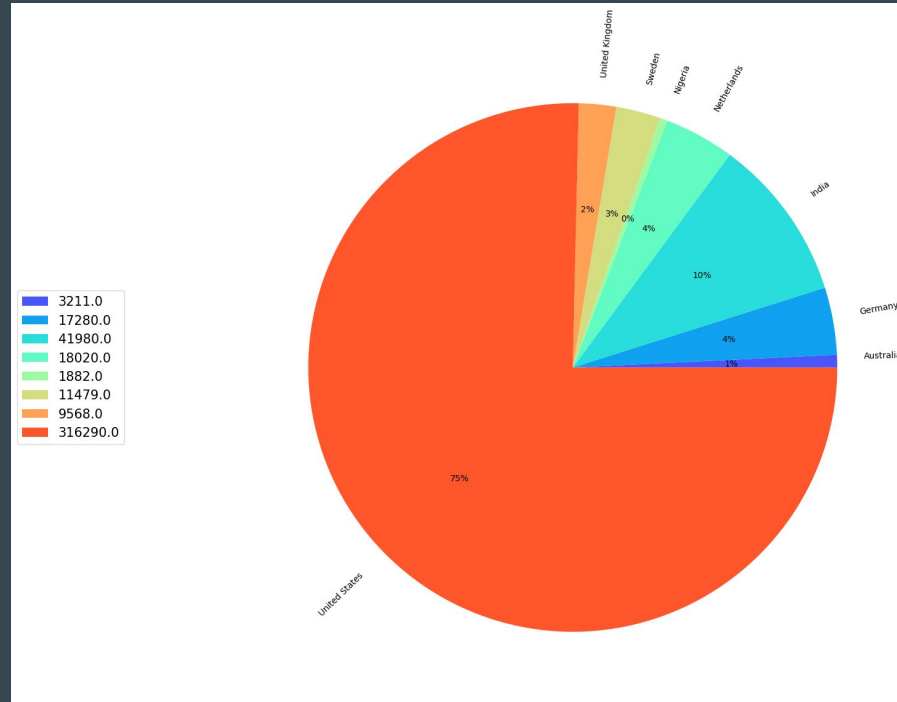


-India with highest laid off counts in Asia had over 30,000 employees layoffs in 2022, around 10,000 employees layoffs in 2023, led to over 40,000 employees.

-In Europe, Netherlands had over 17,500 layoff employees, Germany from the range 15000-17000 employees.

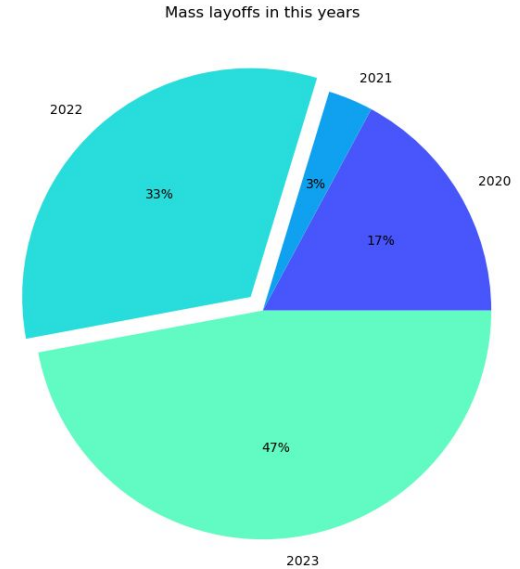
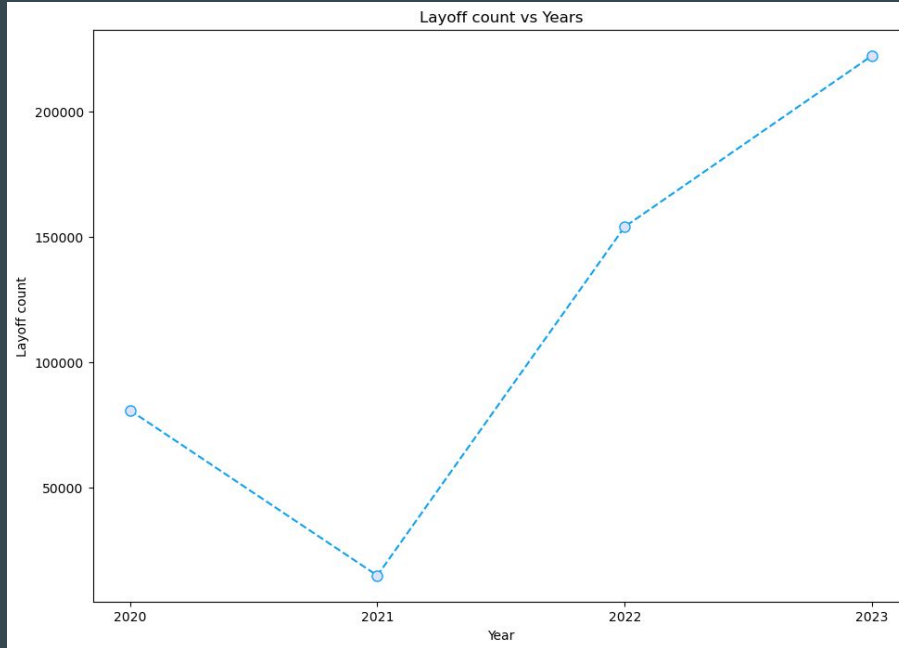
-In Africa, Nigeria with over 1750 layoffs.

# DEEPER ANALYSIS - USA vs. Other countries



The overall total of layoffs worldwide shows that the United States accounts for 75% as of 2023, compared to other countries (India : 10%, Germany: 4%)

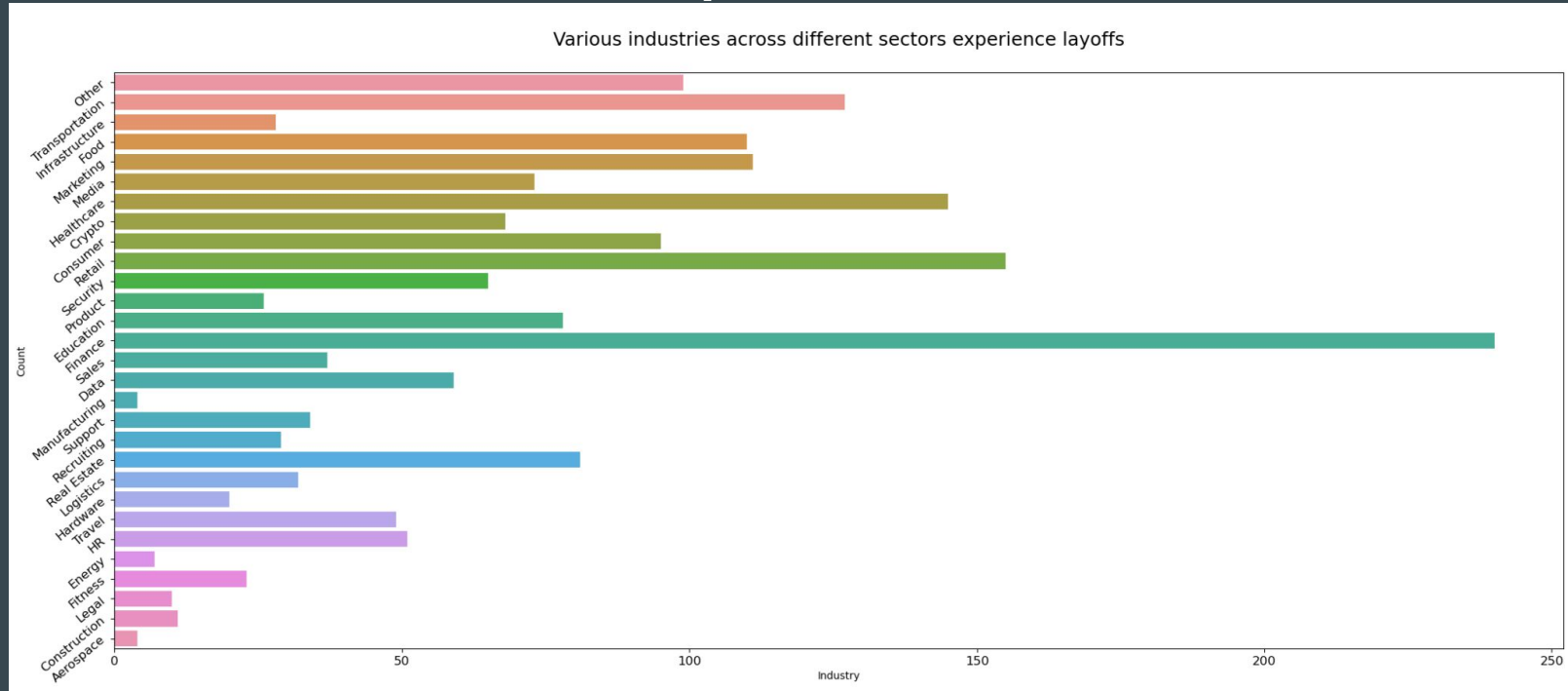
## Q2. The total number of layoffs each year from 2020-2023



Even though 2020 was covid-19 year, we can see that 2023 has the highest number of layoffs (with over 200,000 people in 2023 compared to 2021), take 47% in total compared to 17% in 2020.

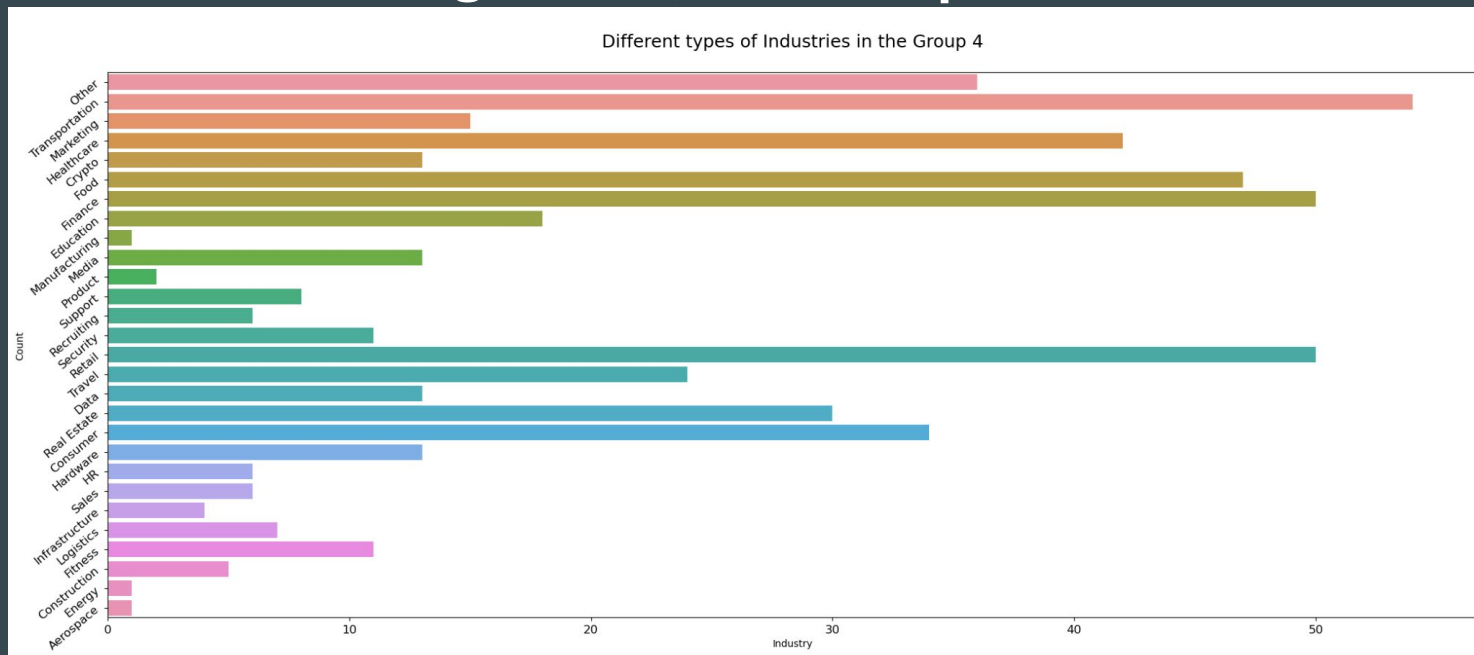


# Q3. Industries have been impacted by layoffs.



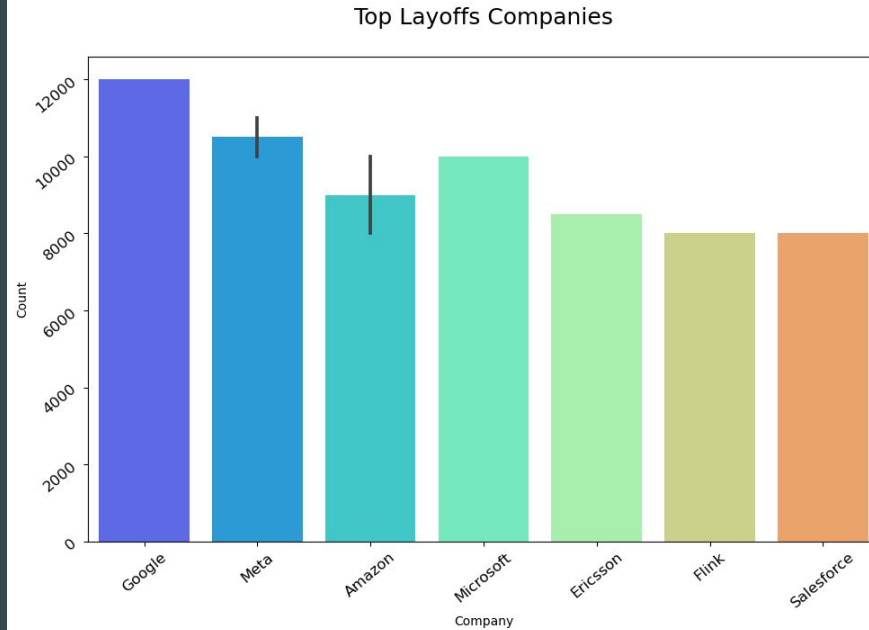
Looking at various industries across different industries, we see Finance with the highest number (from 200-250) being impacted by the mass layoffs.

# DEEPER ANALYSIS - Highest Layoffs Group

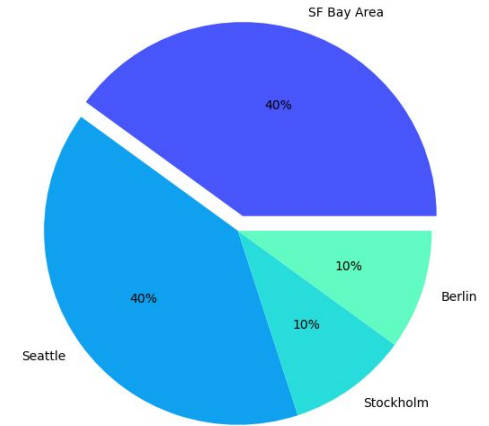


I separated into 4 groups (group 4 with range from 154-11000 layoff count). Transportation sectors with over 50 industries has the highest layoffs, followed by finance with 47 sectors.

# Q4. Top Layoffs Companies as of 2023



Locations of the Top Layoffs companies



Google has 12,000 laid off employees made as of mid-January 2023, losses constitute around 6% of Google's global workforce. Bay Area companies cut total 16,500 jobs. Microsoft laid off nearly 2,200 Seattle-area workers, 22% of the 10,000 global cuts.

Seattle and SF Bay Area have the highest layoffs location, take 40% in total around the world, compared to 10% in Berlin and Stockholm.

# Final Results

## 1. Did the recent layoffs primarily affect the US and not other countries?

No, other countries are also being affected by mass layoffs due to the economic downturn. However, the US has received the highest number of laid-offs employees, accounting for 75% of the total.

## 2. Which year witnessed the highest number of layoffs?

No, even though we experienced COVID-19 pandemic in 2020, 2022 and 2023 witnessed the highest number of layoffs, with 2022 accounting for 33% of the total and 2023 representing 47% of the total.

## 3. What industries have experienced the highest number of layoffs globally?

Not manufacturing, retail or hospitality, but the finance industry has the highest number of laid-off employees with approximately 250 sectors being affected.

## 4. Which companies has had the most layoffs in the world?

As of 2023, Google has reported cutting off 12,000 employees, followed by Meta with over 10,000 employees.