

PREFACE

THE PANDEMIC gripped the world for the year's - 2020 and 2021 and despite the personal toll on individuals all over in the United States, it affected some of the biggest industries and specific companies within them differently. Due to this change, we could see change in the behavior patterns of Americans such as reducing expenditure on travel, specialty retail while turning to online delivery. The goal of this project is to understand these changes by conducting a detailed **analysis** on the - **Industries, Companies** that were adversely affected or **suffered** and the subsequent effects on the employees in terms of **headcounts**. In addition to this, the analysis also gets an insight on the industries and companies that were **resilient** to the Pandemic by showing a continual increase in profits during this period. I hope this insight assists people in making decisions to align to this change in behavior and allow more companies resiliency during a period of uncertainty

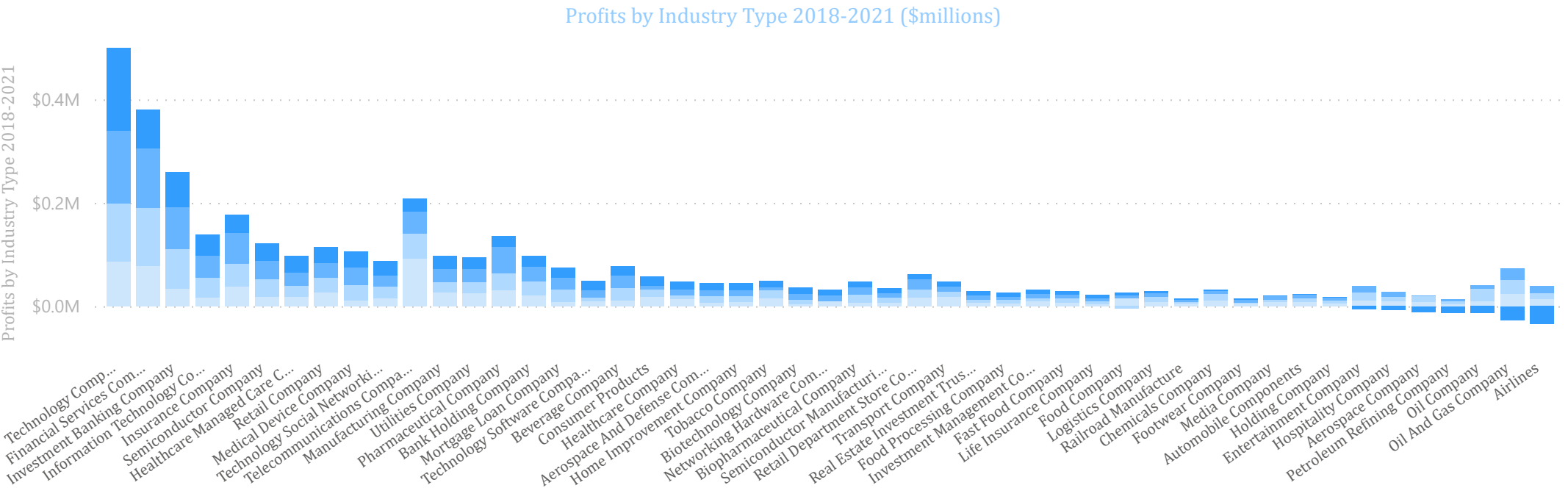
DETAILS

- All the raw data - Excel, SQL queries given in the project README.md file - <https://github.com/adi1988/Winners-and-Losers-Fortune-1000-companies-from-2018-2021/blob/main/README.md>

SUMMARY OF THE PROJECT

- Visualization of the Industries and Individual Companies that **suffered** and were **resilient** in the pandemic
- Stacked graph for Profits of the Industries and Individual companies of the US market for years 2018 - 2021 (compared with splicer)
- Details of the Industries and Individual Companies that **suffered** and were **resilient** in the Pandemic
- Headcount Change for the same Companies in a table form
- Headcount Change for the Companies that **suffered** and were **resilient** during the Pandemic
- Changes including headcount changes for Companies, Industries that **suffered** in the pandemic
- Changes including headcount changes for Companies, Industries that were **resilient** in the pandemic
- Key Takeaways and Conclusion

Comparing Profits by Industry Type for the Years 2018 - 2021

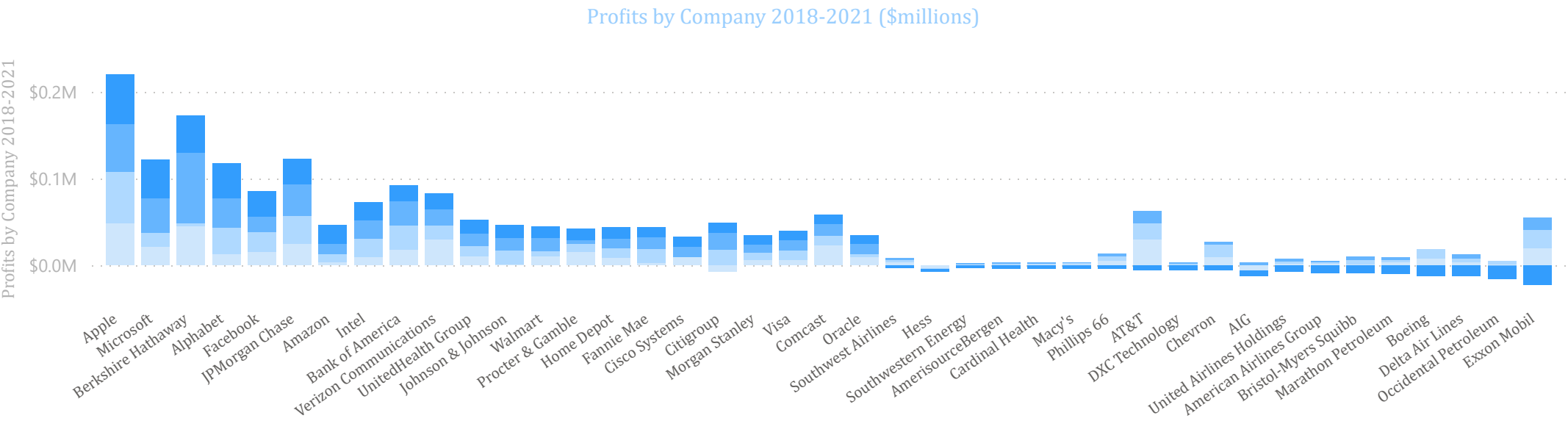


Industry Type

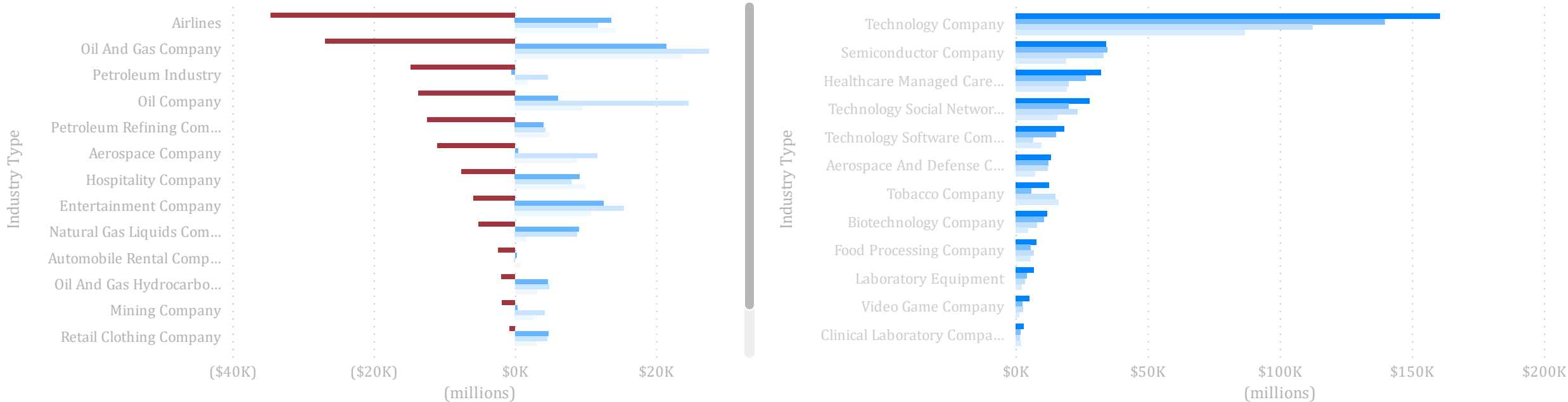
All

- Size of Technology Company has increased to \$160.6 billion or 13.1% of total profit by industry in 2021. Of these Apple, Microsoft and Amazon have recorded the highest profits in 2021
- The Profits by company have been filtered by profits >10billion and <(3billion) to clear the companies in the middle and show the suffering companies and the resilient ones
- Airlines profits in 2021 seemed to have the biggest drop of all industries with a decline of \$35billion or 139.5% from 2020 profits of these Delta Airlines, American Airlines and United Airlines have recorded the highest losses

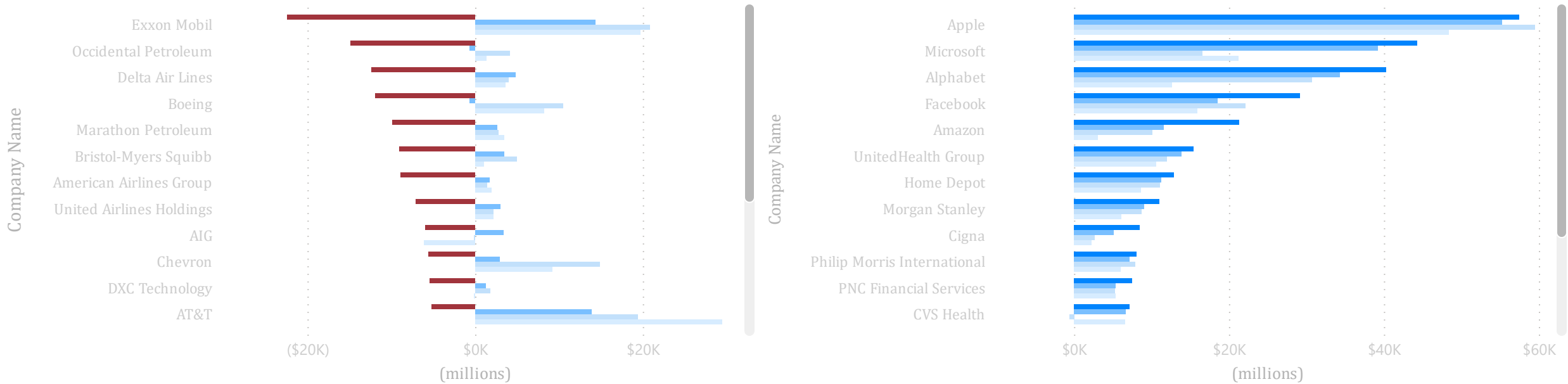
Comparing Profits by Company for the Years 2018 - 2021



Industries that **Suffered** and were **Resilient** During the Pandemic



Individual Companies that **Suffered** and were **Resilient** During the Pandemic



Industries and Individual Companies that **Suffered** and were **Resilient** During the Pandemic

(\$22.44K)

Min Profits for a Company_2021 (in millions)

\$57.41K

Max Profits for a Company_2021 (in millions)

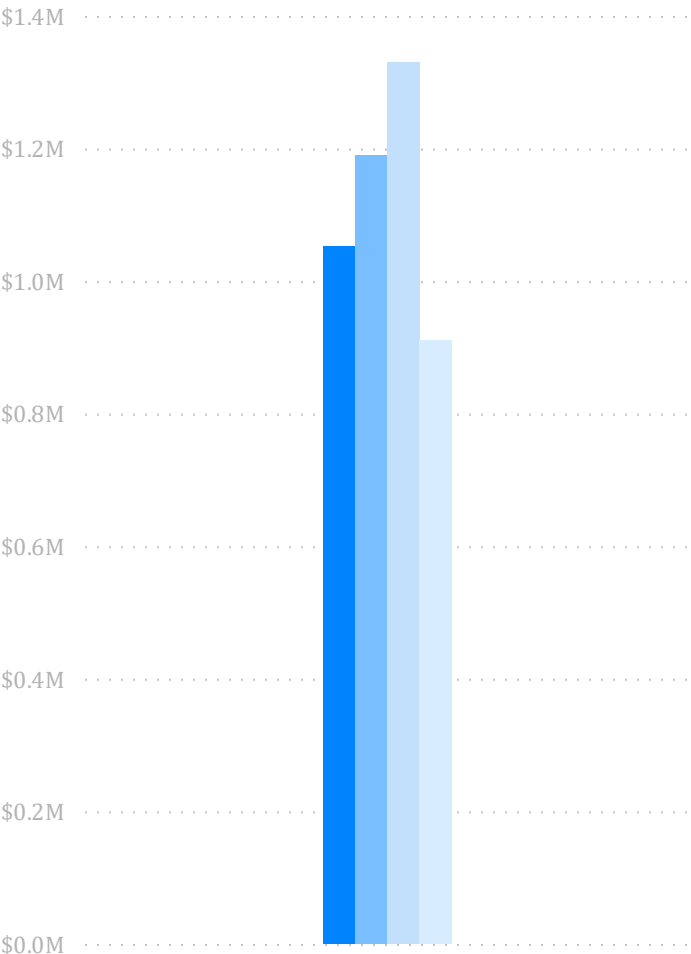
200

Different Industry Types

820

Number of Companies in List

Profits 2018-2021 (millions)



The following are observations on details of both industries and individual companies that **suffered** and were **resilient** during the Pandemic

Airline Companies

- Profits in 2021 declined by ~ \$35 billion or 139.5 % from the earlier year 2020.
- Delta Airlines, American Airlines and United Airlines had the most losses to the tune of \$12.4 billion or 138.4% , \$8.8 billion or 118.98% , \$7.0 billion or 142.57% as compared to 2020 profits.

Oil and Gas Companies

- Profits in 2021 declined by 179.9 % from the earlier year 2020
- Exxon Mobil had the most losses of \$22.4 billion or 256.6 %

Technology Companies

- Profits in 2021 increased by \$160.6 billion or a 13.1 % from the earlier year and also had the highest profit of all four years 2018-2021
- Apple, Microsoft and Amazon showed \$57.4 billion or a 3.8%, \$44.3 billion or a 12.8 % and \$21.3 billion or a 45.68% increase in profits in 2021

HEADCOUNT ANALYSIS

- After Visualization of the Industries, Companies that both suffered and were resilient during the Pandemic, it is important to turn our attention to the changes in the Headcount for the same
- This allows us to not only see which industries and companies changed but also how it affected the headcount subsequently

Headcount of Companies that Suffered and were Resilient During the Pandemic (Table form)

| Company Name | 2018 | 2019 | 2020 | 2021 |
|-------------------------|------------|------------|------------|------------|
| AT&T | 254,000.00 | 268,220.00 | 247,800.00 | 230,760.00 |
| Boeing | 140,800.00 | 153,000.00 | 161,100.00 | 141,000.00 |
| DXC Technology | 60,000.00 | 150,000.00 | 130,000.00 | 138,000.00 |
| American Airlines Group | 126,600.00 | 128,900.00 | 133,700.00 | 102,700.00 |
| Macy's | 130,000.00 | 130,000.00 | 123,000.00 | 75,711.00 |
| Delta Air Lines | 86,564.00 | 88,680.00 | 91,224.00 | 74,000.00 |
| Exxon Mobil | 71,200.00 | 71,000.00 | 74,900.00 | 72,000.00 |
| Marathon Petroleum | 43,800.00 | 60,350.00 | 60,910.00 | 57,900.00 |
| Cardinal Health | 40,400.00 | 50,200.00 | 49,500.00 | 48,000.00 |
| Chevron | 51,900.00 | 48,600.00 | 48,200.00 | 47,736.00 |
| AIG | 49,800.00 | 49,600.00 | 46,000.00 | 45,000.00 |
| Bristol-Myers Squibb | 23,700.00 | 23,300.00 | 30,000.00 | 30,250.00 |
| AmerisourceBergen | 19,500.00 | 20,500.00 | 21,500.00 | 21,500.00 |
| Phillips 66 | 14,600.00 | 14,200.00 | 14,500.00 | 14,300.00 |
| Occidental Petroleum | 11,000.00 | 11,000.00 | 14,400.00 | 11,800.00 |

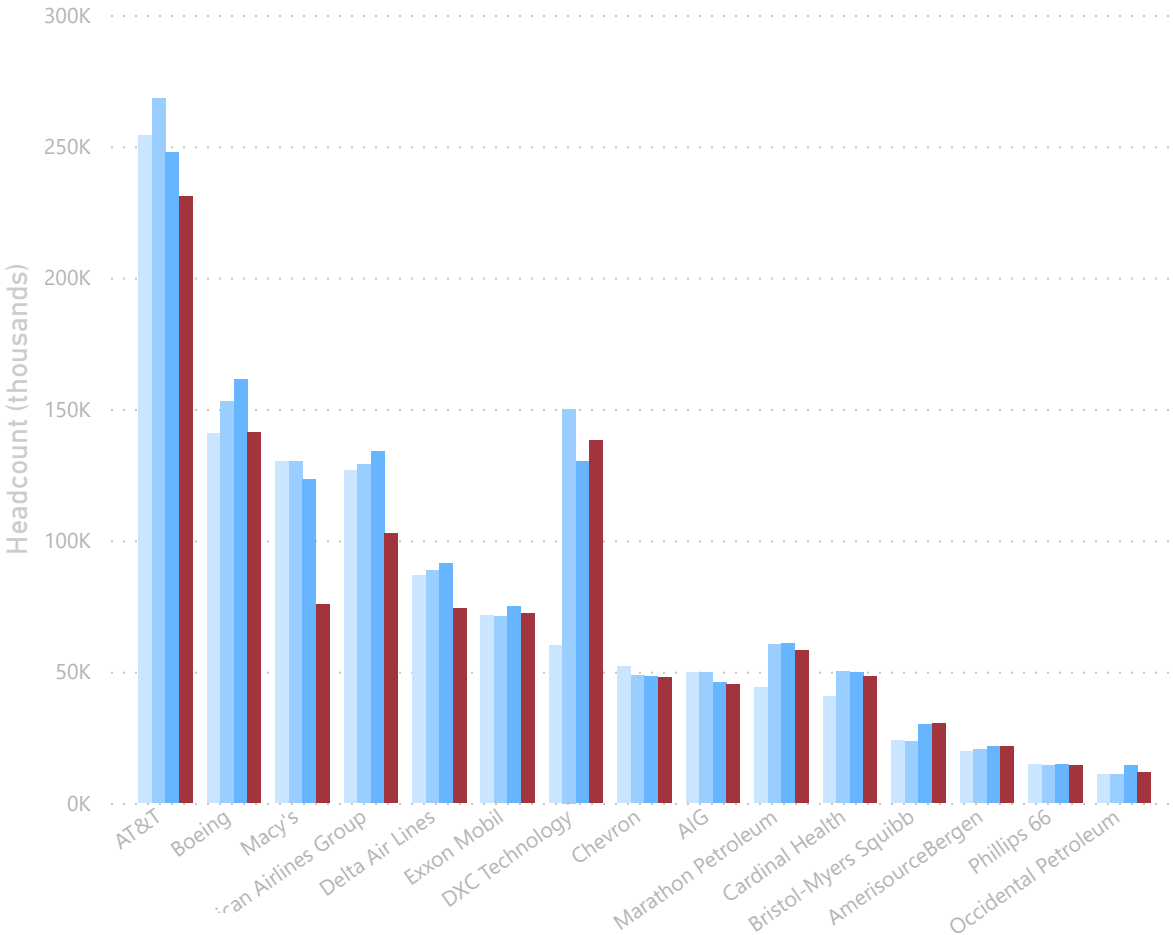
Most companies recorded an increase in headcount in 2019 and some such as Boeing, American Airlines Group, Delta Air Lines, Marathon Petroleum, Bristol Myers-Squibb, Amerisource Bergen, Phillips66 and Occidental Petroleum further on in 2020 too. However most companies with the exception of DXC Technologies, Bristol Myers Squibb and Amerisource Bergen lost headcount in 2021

| Company Name | 2018 | 2019 | 2020 | 2021 |
|-----------------------------|------------|------------|------------|--------------|
| Amazon | 566,000.00 | 647,500.00 | 798,000.00 | 1,298,000.00 |
| Home Depot | 413,000.00 | 413,000.00 | 415,700.00 | 504,800.00 |
| UnitedHealth Group | 260,000.00 | 300,000.00 | 325,000.00 | 330,000.00 |
| Lowe's | 255,000.00 | 245,000.00 | 260,000.00 | 280,000.00 |
| CVS Health | 203,000.00 | 295,000.00 | 290,000.00 | 256,500.00 |
| Microsoft | 124,000.00 | 131,000.00 | 144,000.00 | 163,000.00 |
| Alphabet | 80,110.00 | 98,771.00 | 118,899.00 | 135,301.00 |
| Lockheed Martin | 100,000.00 | 105,000.00 | 110,000.00 | 114,000.00 |
| Thermo Fisher Scientific | 66,100.00 | 69,200.00 | 75,000.00 | 84,362.00 |
| Cigna | 46,000.00 | 73,800.00 | 73,700.00 | 72,963.00 |
| Philip Morris International | 80,600.00 | 77,400.00 | 73,500.00 | 71,000.00 |
| Morgan Stanley | 57,633.00 | 60,348.00 | 60,431.00 | 68,097.00 |
| Facebook | 25,105.00 | 35,587.00 | 44,942.00 | 58,604.00 |
| PNC Financial Services | 51,632.00 | 51,996.00 | 50,968.00 | 50,403.00 |
| Progressive | 33,656.00 | 37,346.00 | 41,571.00 | 43,326.00 |

Most of the Technology Companies such as Facebook, Microsoft, Amazon, Alphabet kept increasing its headcounts by over 5-10% year on year despite the Pandemic causing other companies to fluctuate annual headcounts over 2018-2021

Headcount of Companies that **Suffered** and were **Resilient** During the Pandemic

Headcount 2018-2021



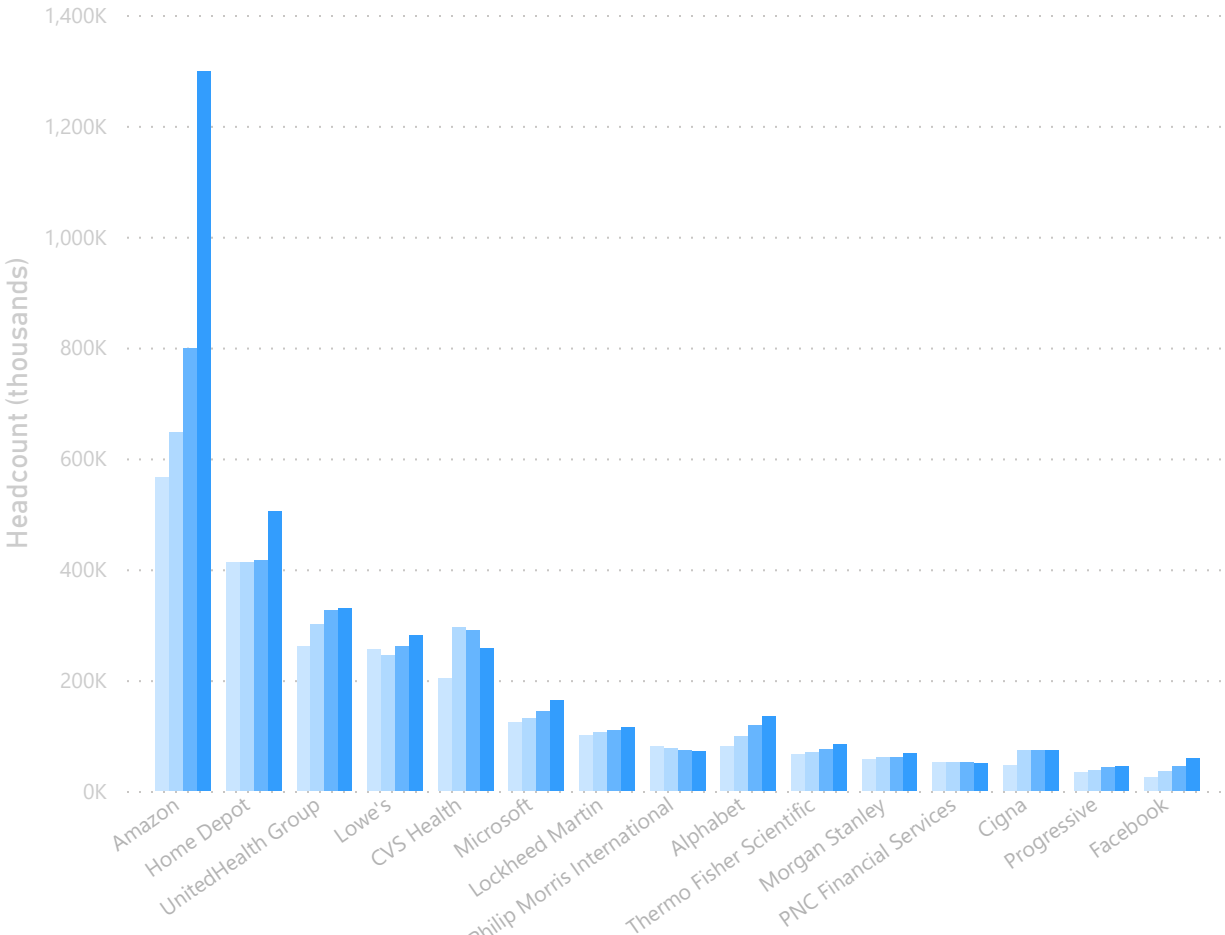
183
Min Headcount for a C...

218.00
Min of 2021

2.20M
Max of 2020

The company with headcount of 2.2 million increased by 100K to headcount of 2.3 million

Headcount 2018-2021



2.30M
Max of 2021

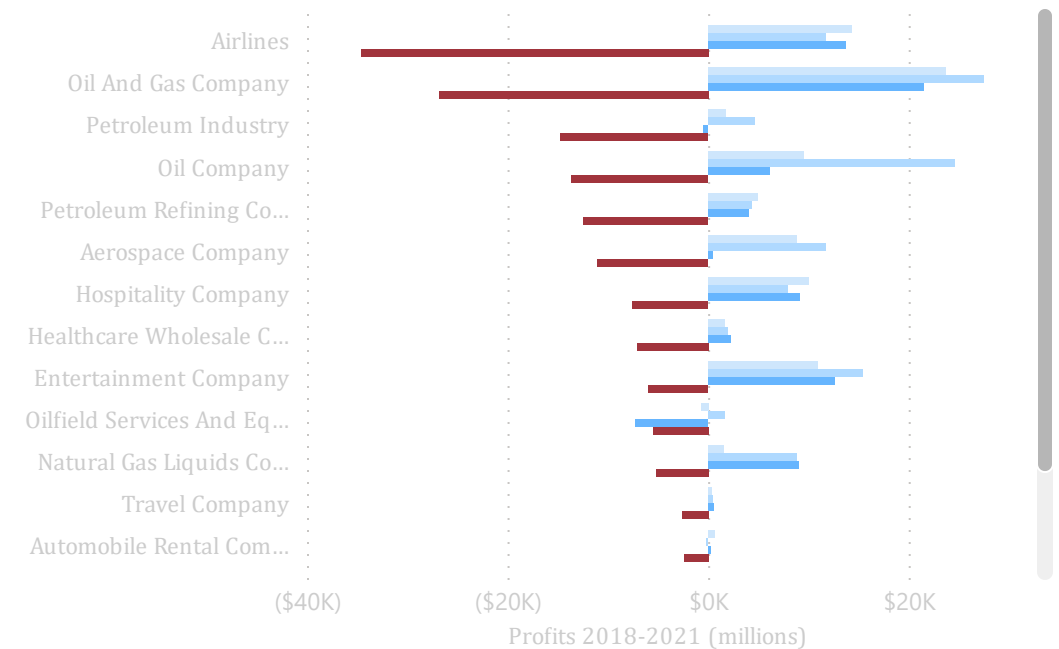
32.48M
Sum of 2020

32.45M
Sum of 2021

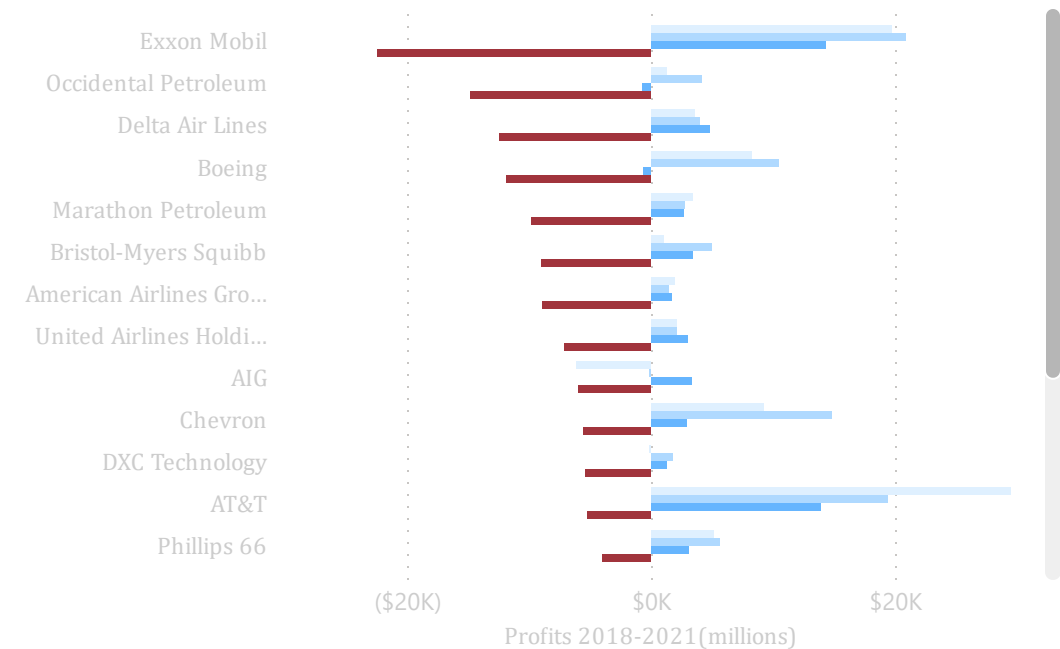
The cumulative headcount of the 820 companies of the fortune 1000 dropped by 30K

Changes for Industries, Companies that suffered in the pandemic along with headcount changes

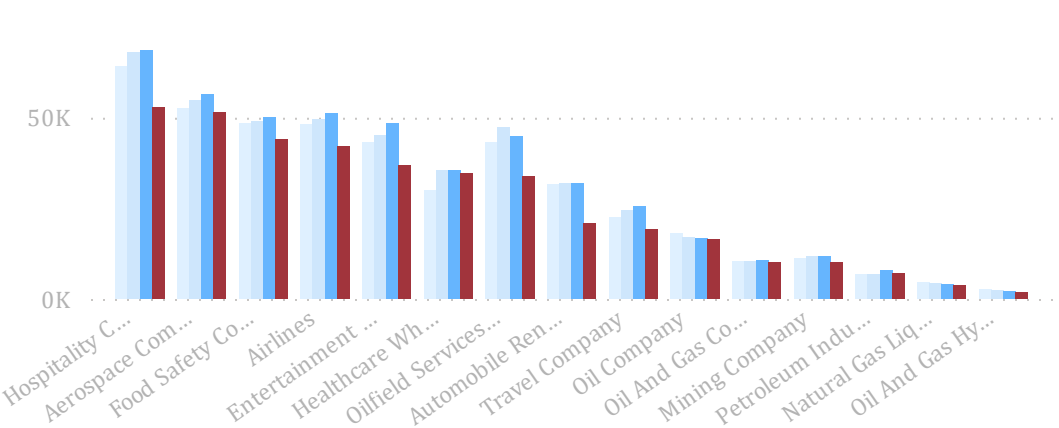
Losses by Type of Industry



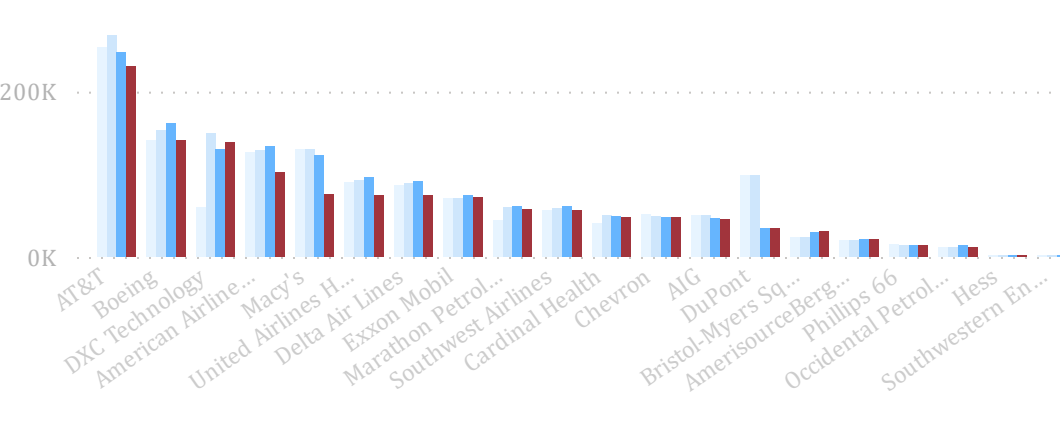
Losses by Company



Headcount 2018-2021 by Industry



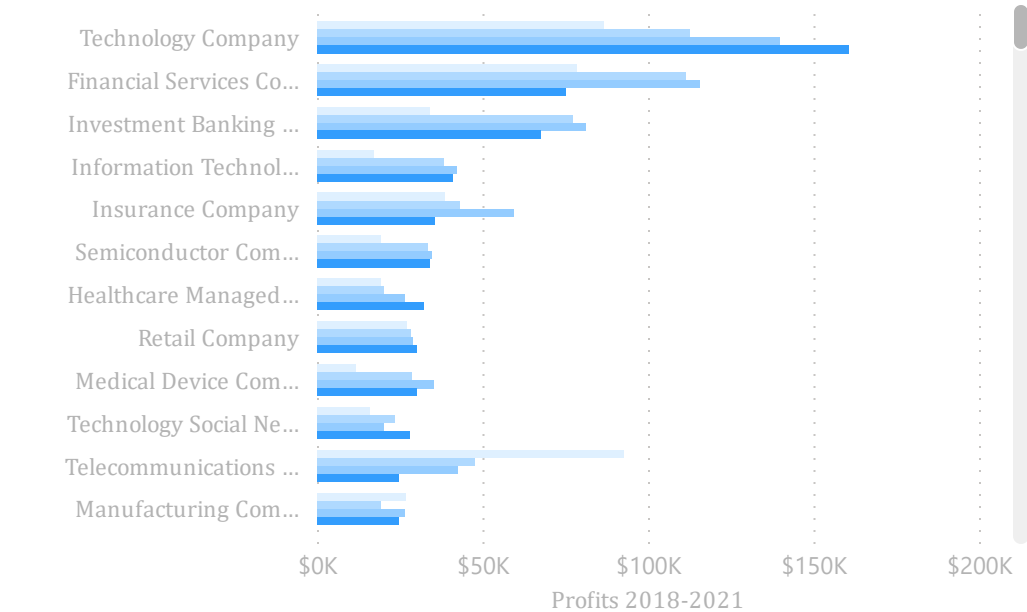
Headcount 2018-2021 by Company



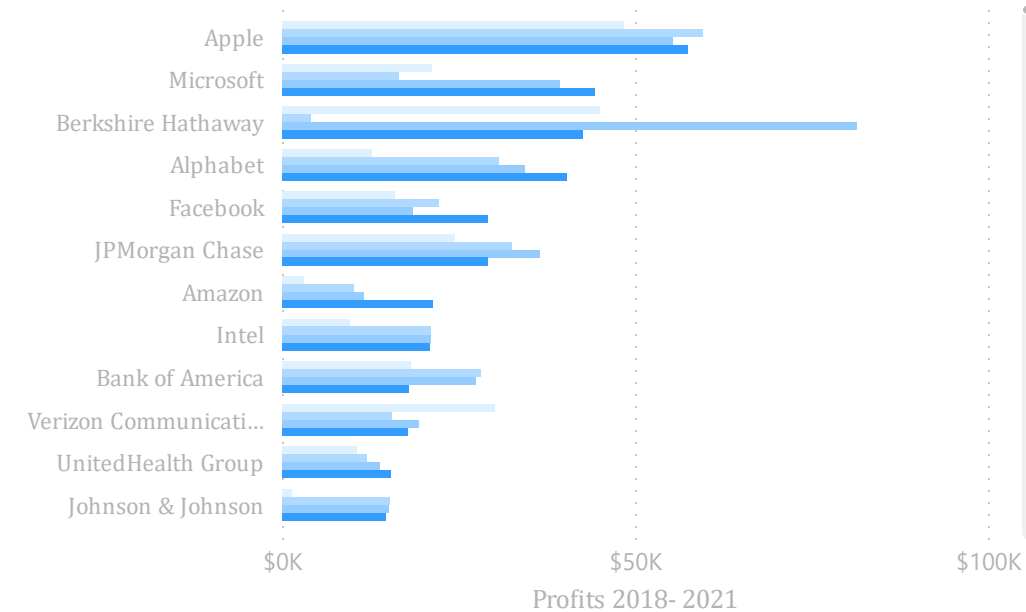
Despite the Airlines, Oil And Gas Company, Petroleum Industry and Oil Company losing - \$35 (billion) (-139.5%), \$27 (billion) (-179.9%), \$13.6 (billion) (-96.6%), \$13.6 (billion) (-144.9%) from year 2020 - 2021, from their companies the largest of which were Delta Airlines, Exxon Mobil, Occidental Petroleum, Chevron which lost - \$12.4 (billion), \$22.4 (billion), \$14.8 (billion), \$5.5 (billion) respectively, the headcount loss was -

Changes for Industries, Companies that were resilient in the pandemic along with headcount changes

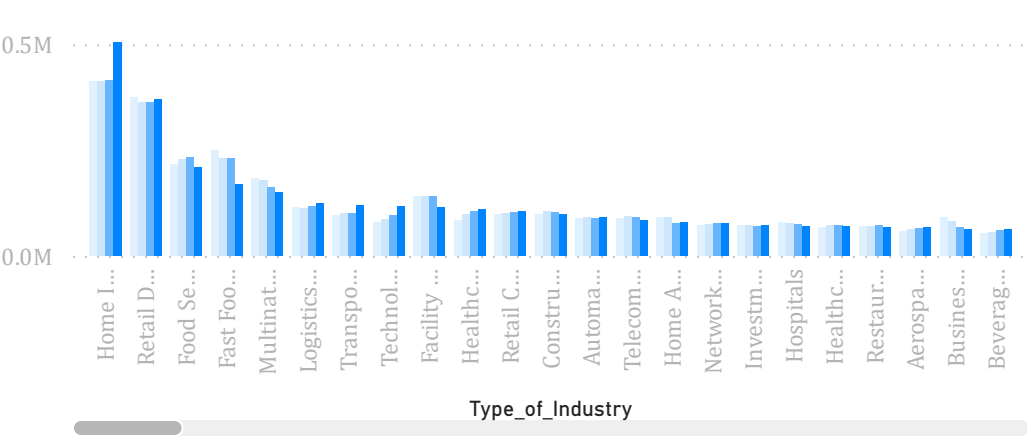
Profits by Type of Industry



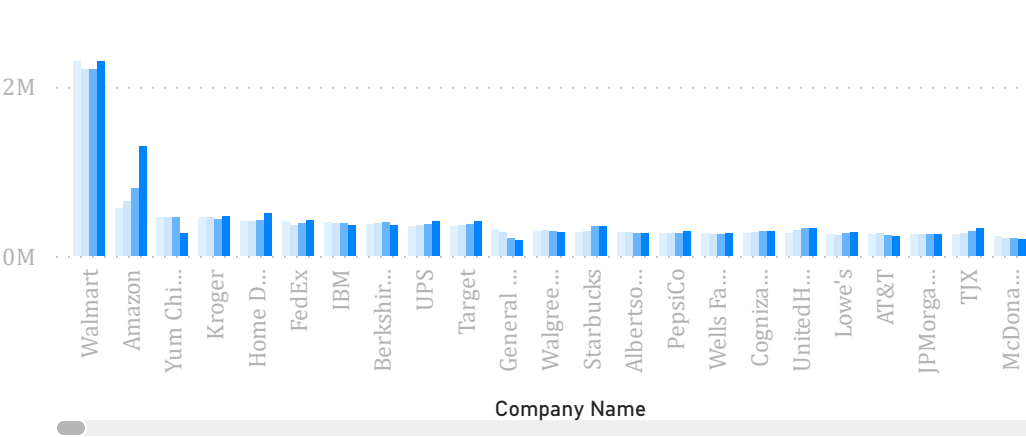
Profits by Company



Headcount 2018-2021 by Industry



Headcount 2018-2021 by Company



Despite Technology Companies

OBSERVATIONS -

From the data from the Profits by Industry, Individual companies and respective headcounts the observations were -

- **Airline Companies** average Profits in 2021 declined by ~ \$35 billion or 139.5 % from the earlier year 2020.
- Delta Airlines, American Airlines and United Airlines had the most losses to the tune of \$12.4 billion or 138.4% , \$8.8 billion or 118.98% , \$7.0 billion or 142.57% as compared to 2020 profits.
- **Oil and Gas Companies** average Profits in 2021 declined by 179.9 % from the earlier year 2020
- Exxon Mobil had the most losses of \$22.4 billion or 256.6 %
- **Technology Companies** showed a \$160.6 billion or a 13.1 % increase in average Profits in 2021
- Apple, Microsoft and Amazon showed \$57.4 billion or a 3.8%, \$44.3 billion or a 12.8 % and \$21.3 billion or a 45.68% increase in profits in 2021

KEY TAKEAWAYS -

- Unlike the level of percentage losses seen in the companies that suffered from the pandemic such as Airlines, Oil, Gas Companies, Petroleum Companies and Oil Companies which saw losses of 80-100%, the Technology Companies did not see profits in that range, which goes to show that they were simply resilient and did not particularly benefit from the pandemic. Exceptions to this were however Amazon, Microsoft which unlike Apple saw profits in 2021 higher than all four years of 12.8 % and 45.7% showing that customers depended on Amazon and Microsoft more during the pandemic than the years without one highlighting the increasing digital adoption of the people during a time of isolation

CONCLUSION -

The data in this project assists us in two findings - **First**, due to the isolation of the pandemic the usual transportation was disrupted and this can be seen in the drawdown of transportation related industries such as - Airlines, Gas Companies, Petroleum Companies and Oil Companies which were the most affected due to people staying home and not needing to travel for work. **Second**, the data displays the people's sudden shift in the adoption of technology by the increased profits in Technology companies such as Amazon and Microsoft which had more profits than any time during the absence of a pandemic. Hence, these findings illustrate the change in peoples daily habits in a period of such disruption and allows companies to predict future patterns incase a similar situation is presented in the future