Census API - 2019 Annual Business Survey

Salma Tahlil, Susan Lu, Mason Lonoff, Rob Dewan

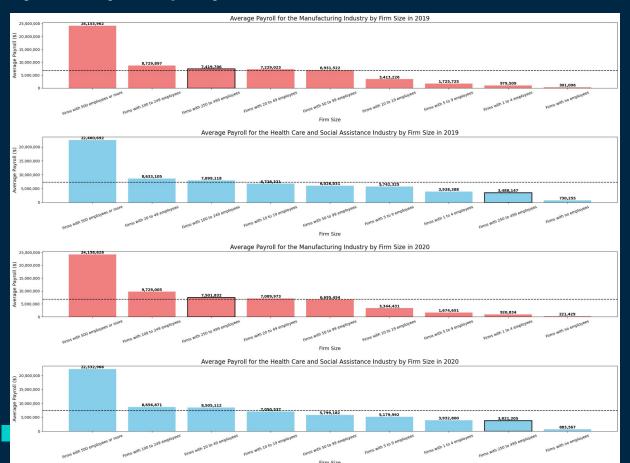


Initial Question:

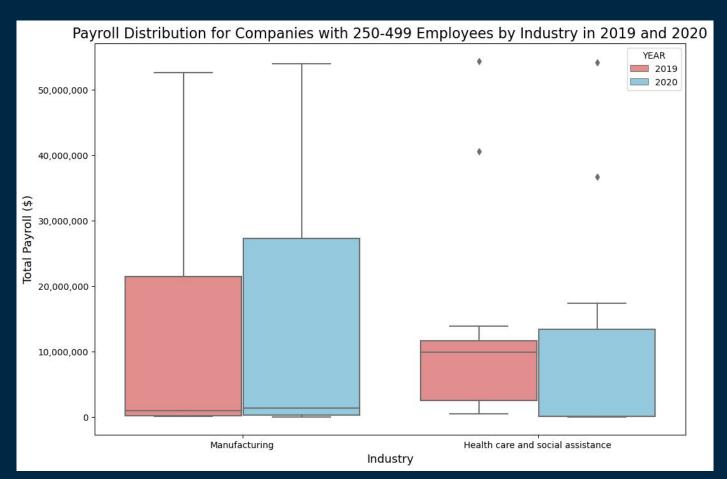
How have industries changed as automation has increased?



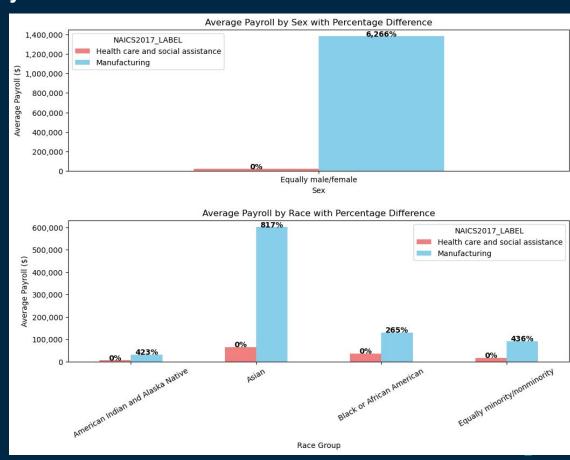
Average Payroll by Employee Size



Payroll Distribution



Percent Difference in Payroll



Characteristics of Businesses

Initial Questions:





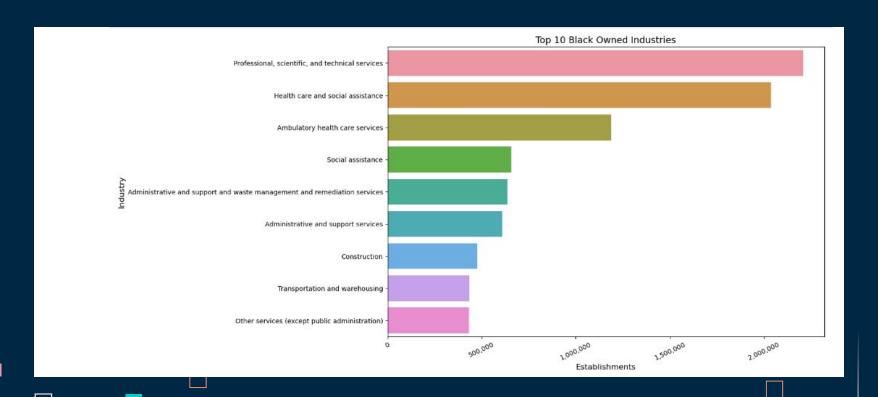


What industries have a higher number of black owners?

Are they different or similar to female black owners? Are there drastic differences between the two?

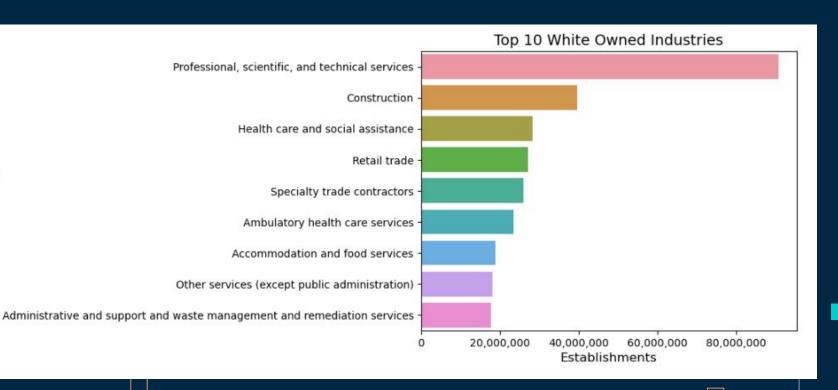
How different are they from white owners?

Black Owners

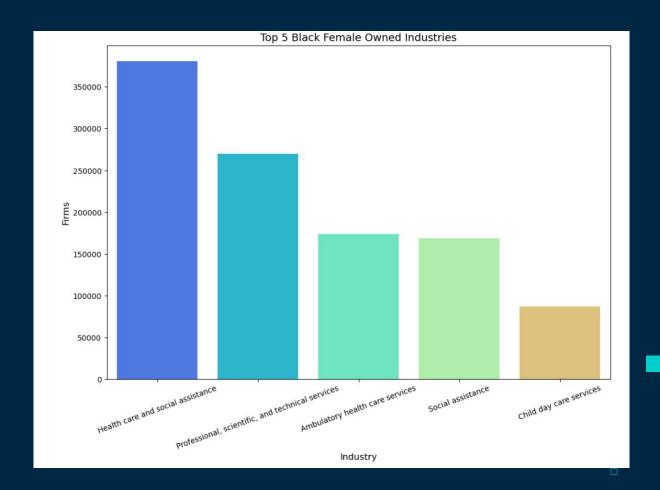


White Owners

Industry



Black Female Owners



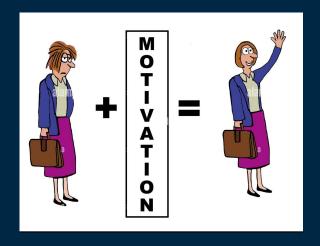
Characteristics of Business Owners

Initial Questions:

 What educational background do the business owners in America have and do they vary significantly by race?

 What motivates them to own their own business?

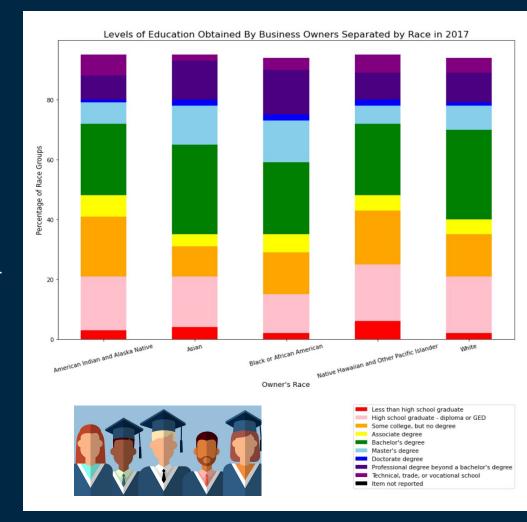




Highest Level of Education Obtained

Data is presented in a percentage format due to the significantly high volume of the white race.

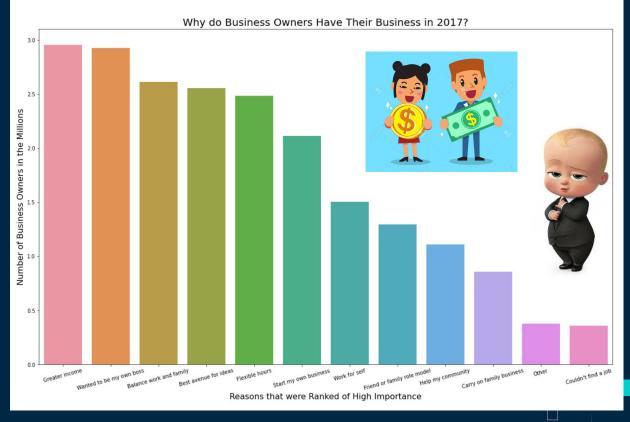
For easier comparison, the lower levels of education is ordered at the bottom and increases going up. But miscellaneous and ambiguous levels are placed at the top.



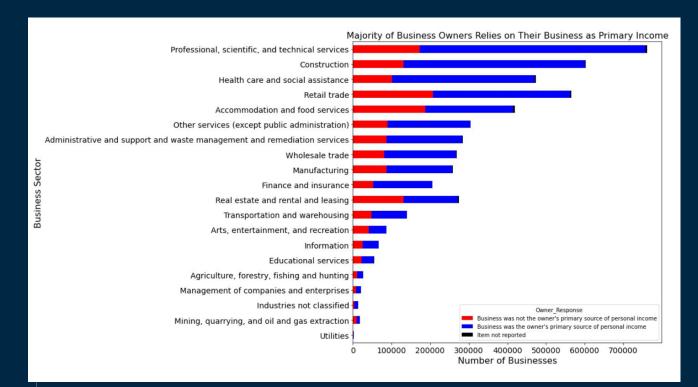
To get this visualization prepared, a new table had to be made to change data within 1 column of 36 rows to 3 columns of 9 rows.

Only one column is plotted to avoid clustering on the graph.

We should take into consideration that a business owner can rank multiple values as 'Very important' when interpreting the data.



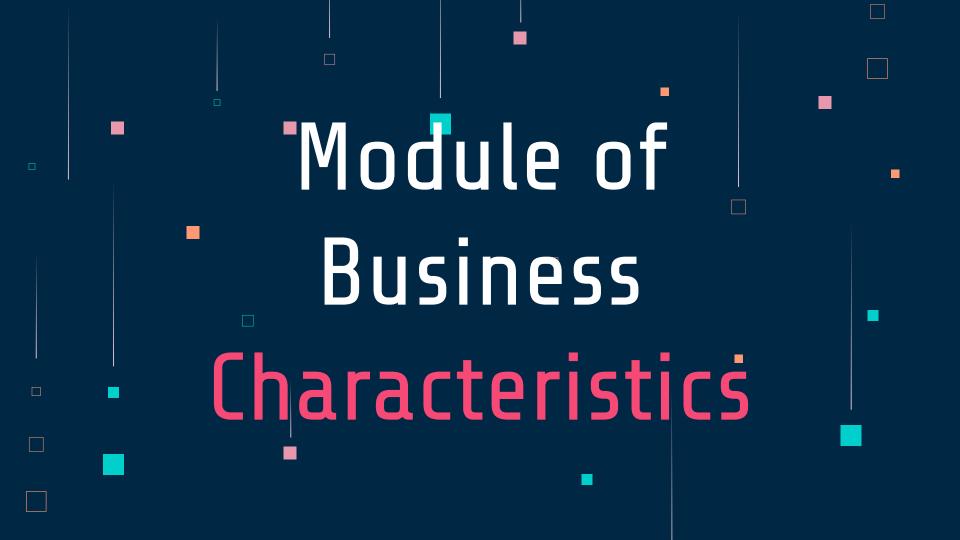




This graph was made by aggregating the dataset by Owner's Response and Business Sectors. Since business owners who responded only had one of two options, comparison between the two responses are very clear.

This graph can also be used to see how many business owners fall under each business category.

Number of Owners that Rely on Their Business for Primary Income

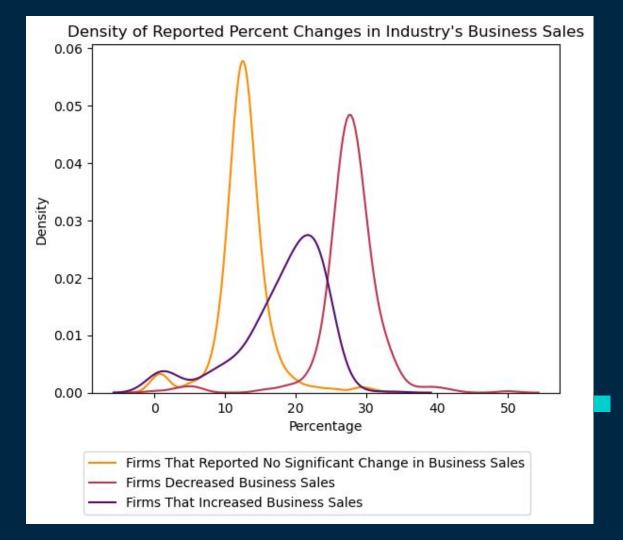


Initial Question:

What was the effect of COVID-19 pandemic on industry business sales?

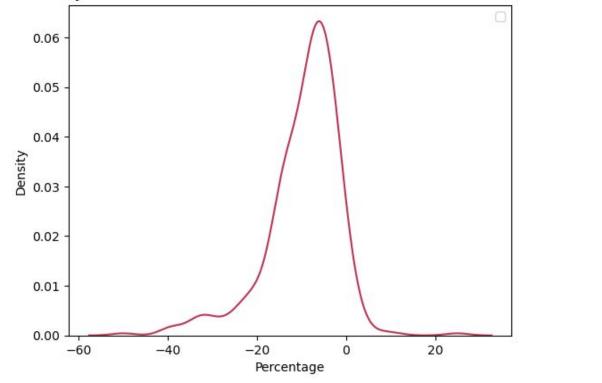


Percent Change

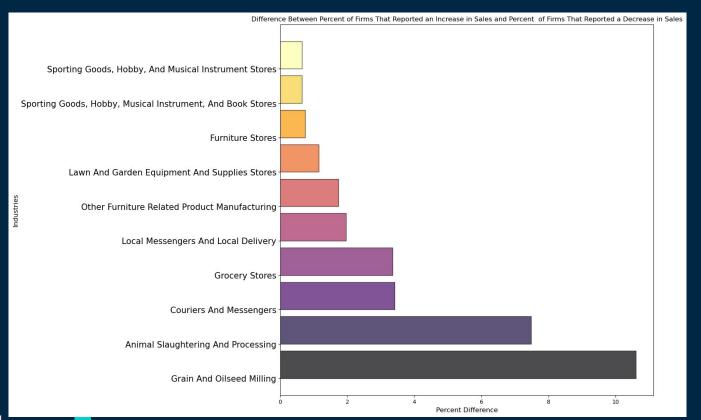


Percent Difference

Density of Industry's Percent Difference Between an Increase and Decrease in Business Sales



Greatest Positive Difference Between Percent Increase and Percent Decrease



Greatest Negative Difference Between Percent Increase and Percent Decrease

