



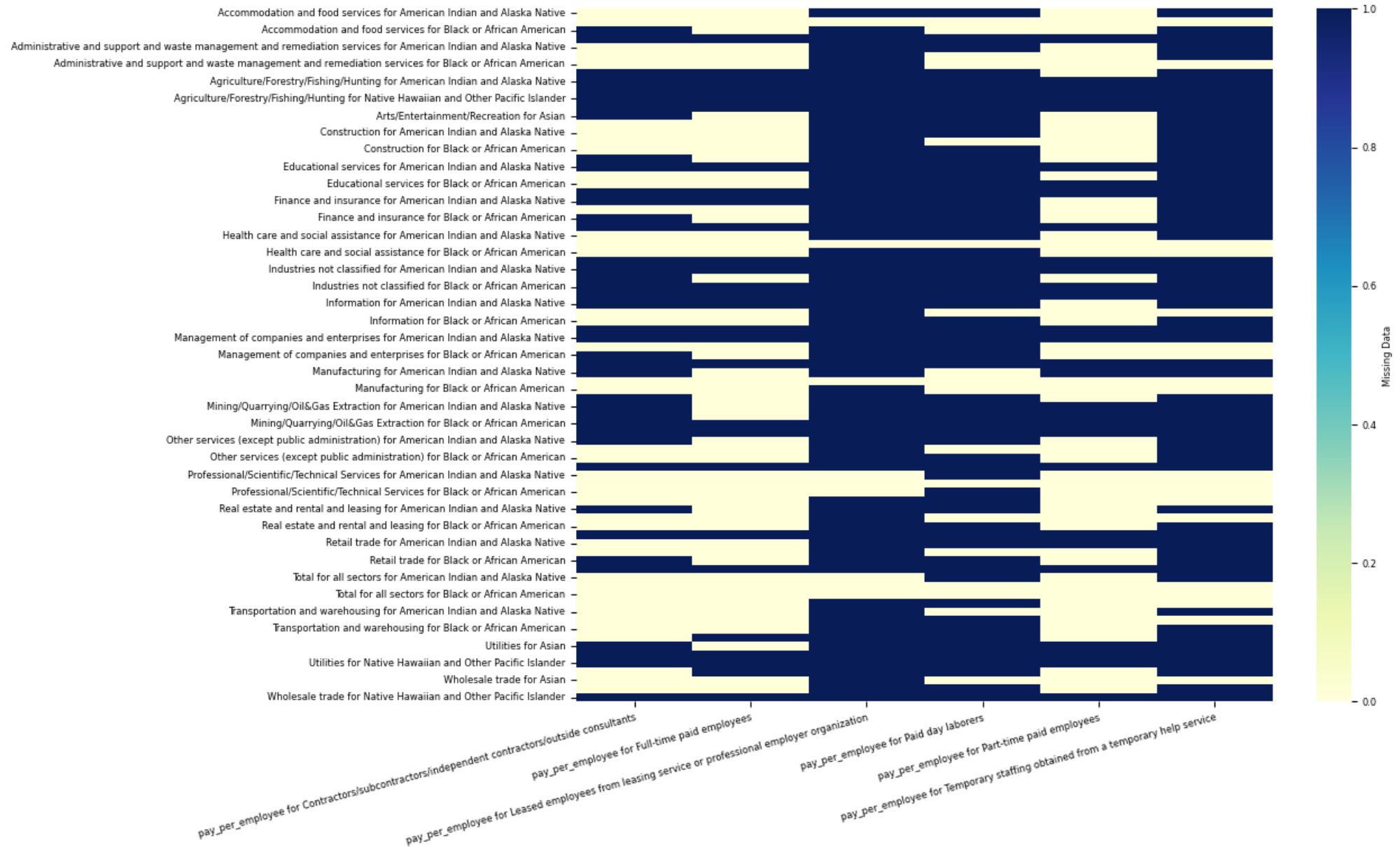
US CENSUS BUREAU 2019 ANNUAL BUSINESS SURVEY

Armin Nouri, Chris Kusha, Jassleen Bhullar, Sara Douglas

Overview

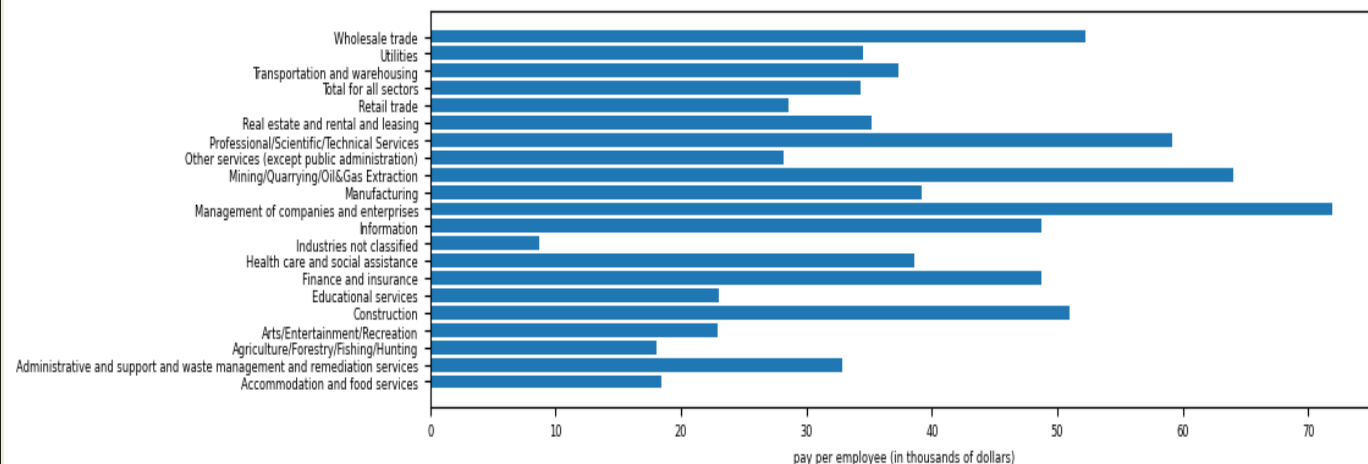
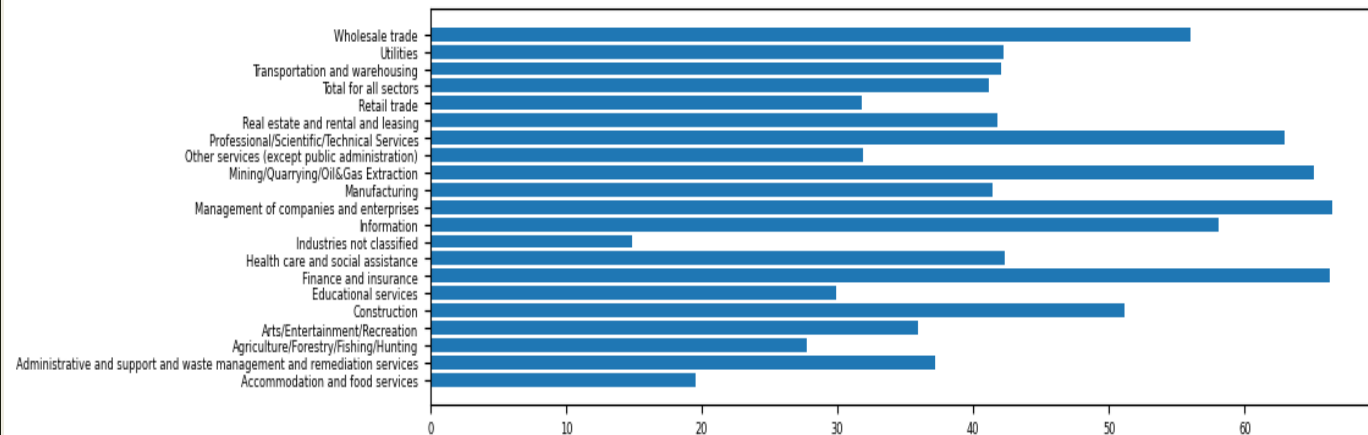
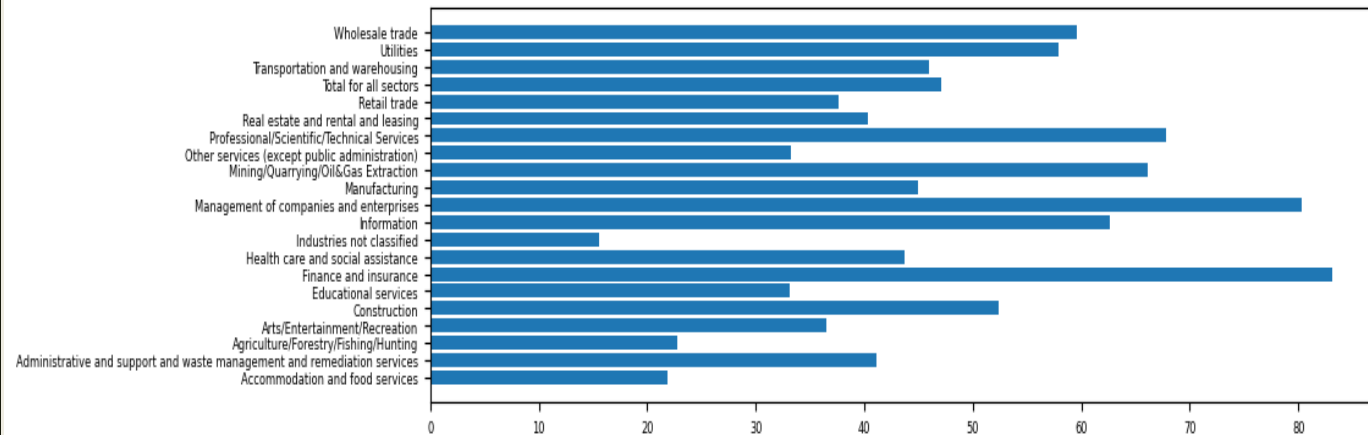
- About the Dataset
- Business Characteristics
 - *Null Distribution*
 - *Annual Pay per Employee*
 - *Customer Distribution*
- Revenue
 - *Race vs Revenue*
 - *Revenue Disclosure*
- Owner Demographic
 - *Breakdown by State*
 - *Breakdown by Age group*
- Technology
 - *Usage across states*
 - *Usage across industries*
 - *Impacts on workers*

Null Distribution

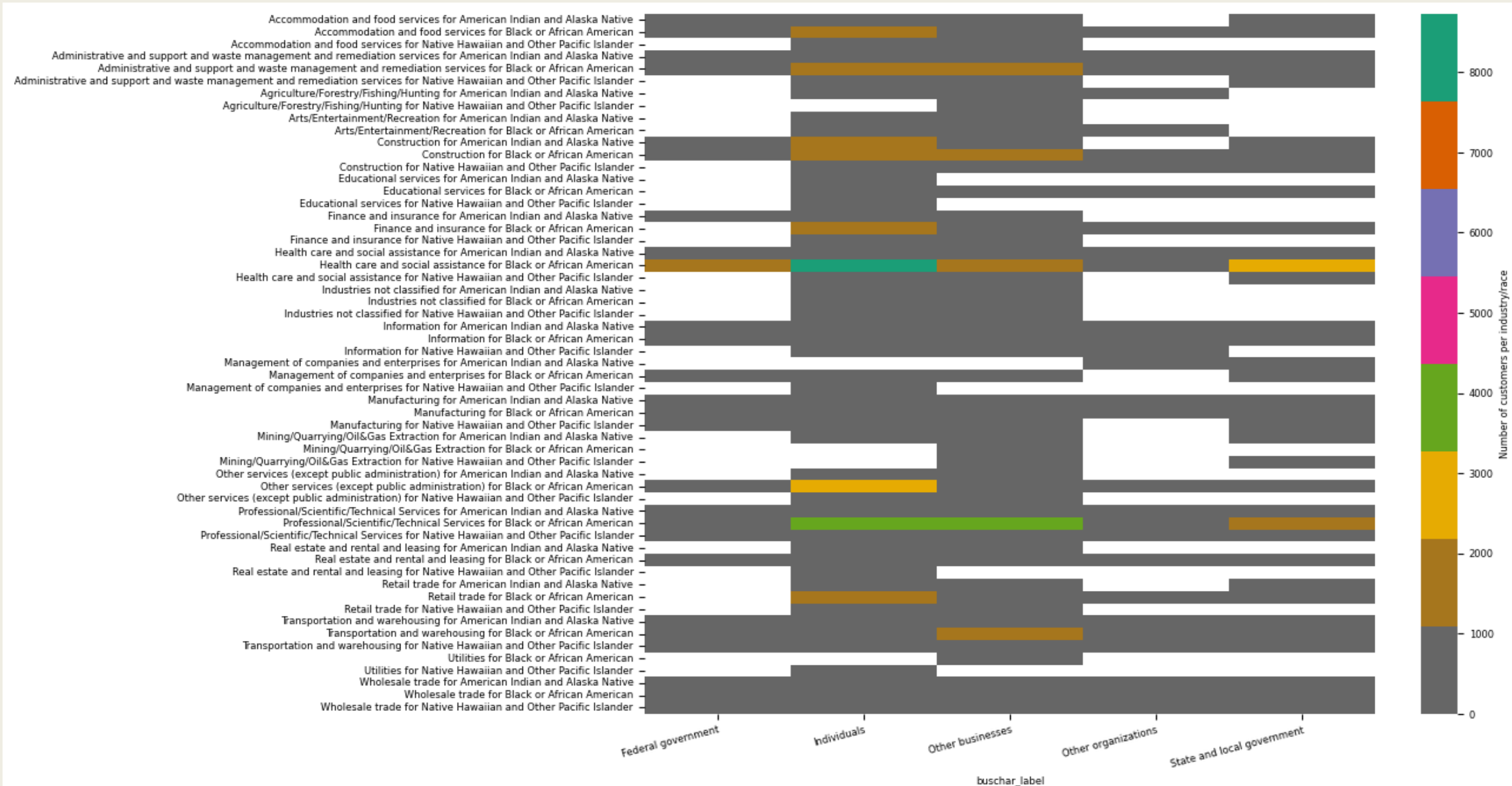


Annual Pay per Employee

- In thousands of dollars
- Grouped by industry and employer type
- From top to bottom:
 - *Contractors*
 - *Full time*
 - *Part time*

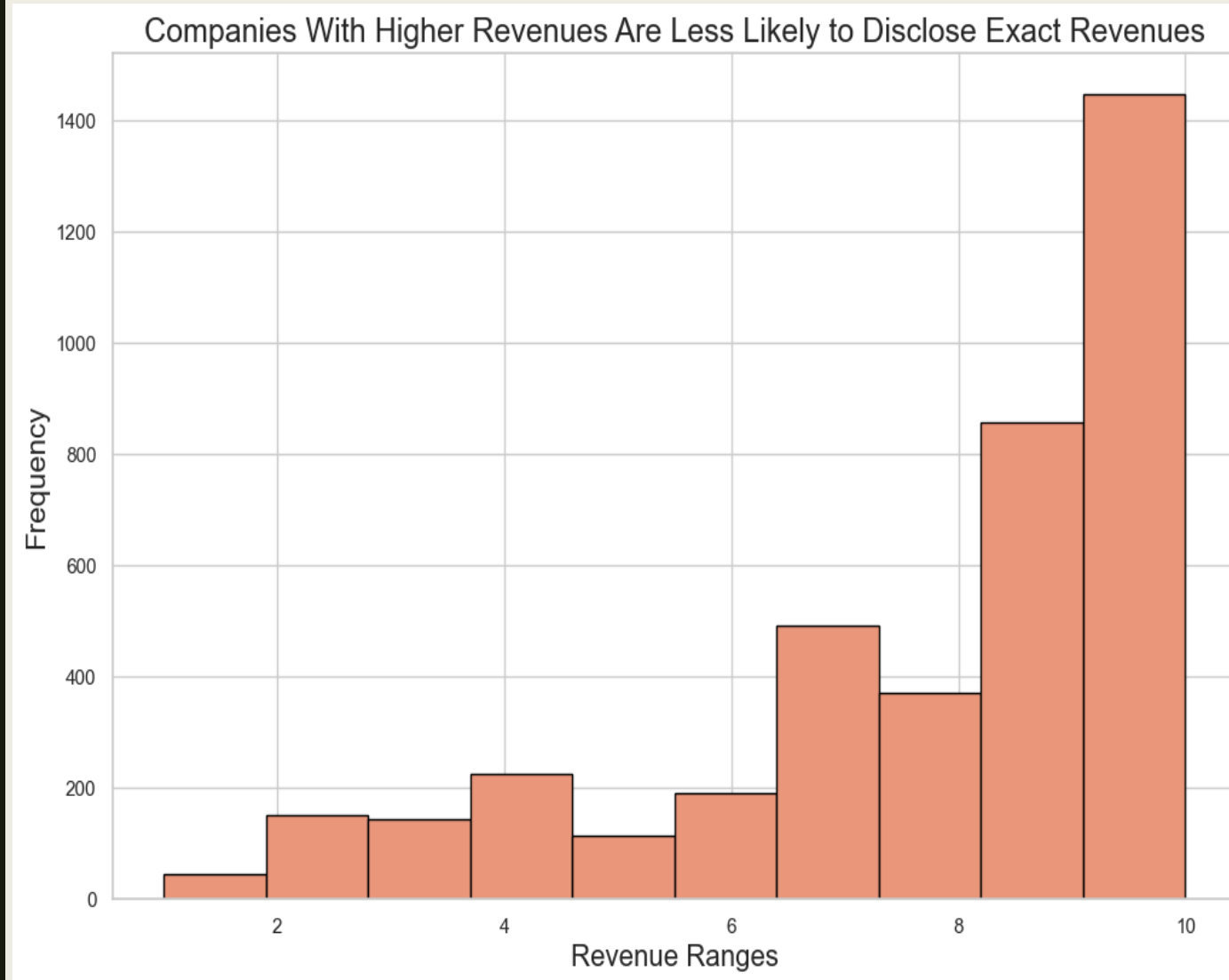


Customer Distribution

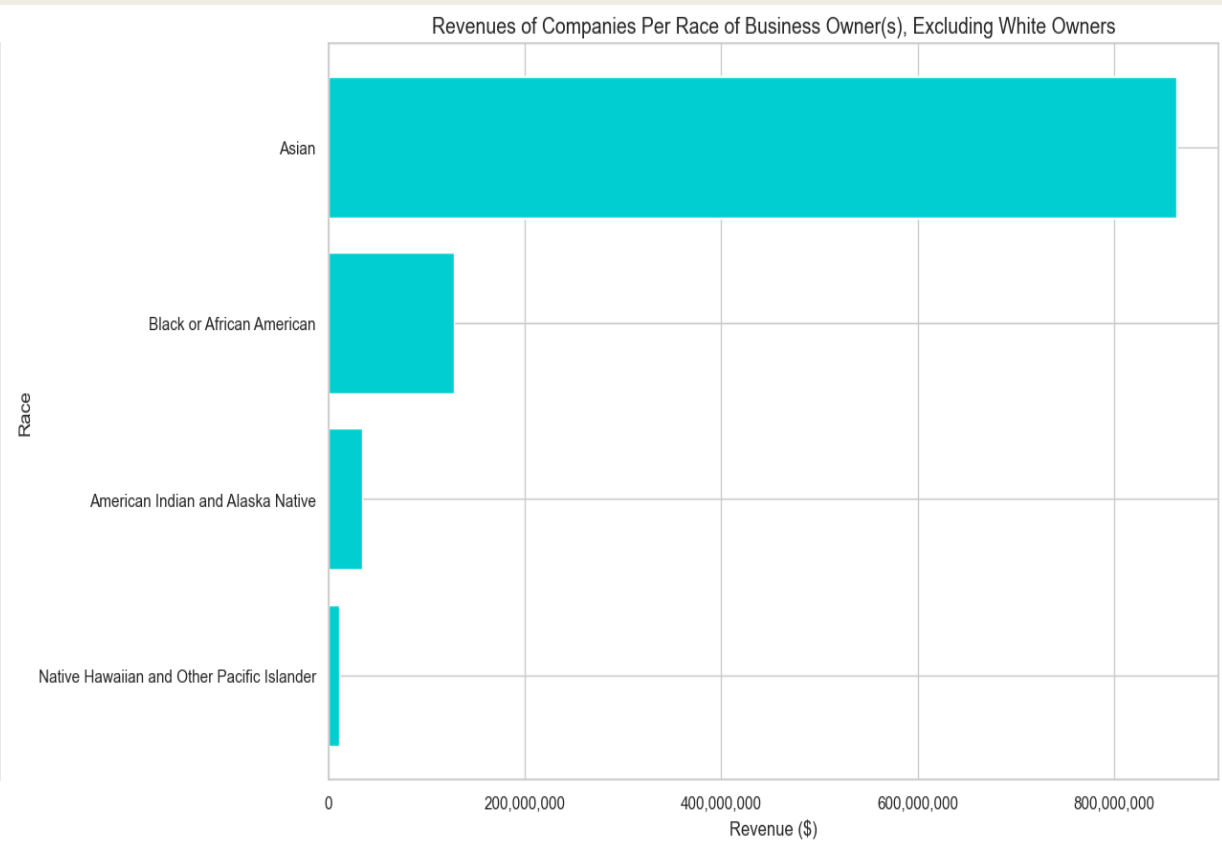
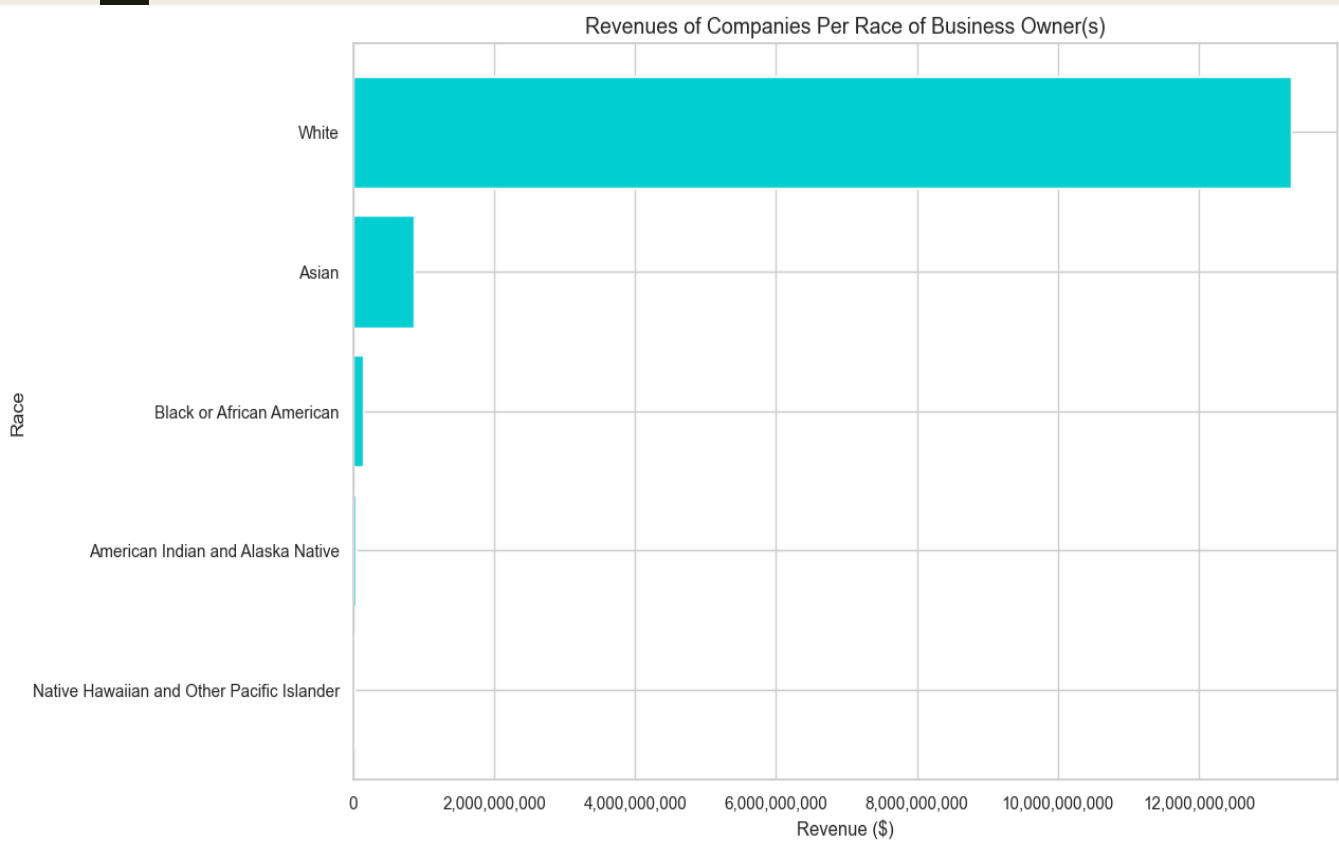


Revenue Disclosure

- Privately-owned companies don't need to disclose revenues
1. Less than \$1 million
 2. \$1 million to less than \$5 million
 3. \$5 million to less than \$15 million
 4. \$15 million to less than \$50 million
 5. \$50 million to less than \$75 million
 6. \$75 million to less than \$150 million
 7. \$150 million to less than \$500 million
 8. \$500 million to less than \$1 billion
 9. \$1 billion to less than \$5 billion
 10. \$5 billion or more

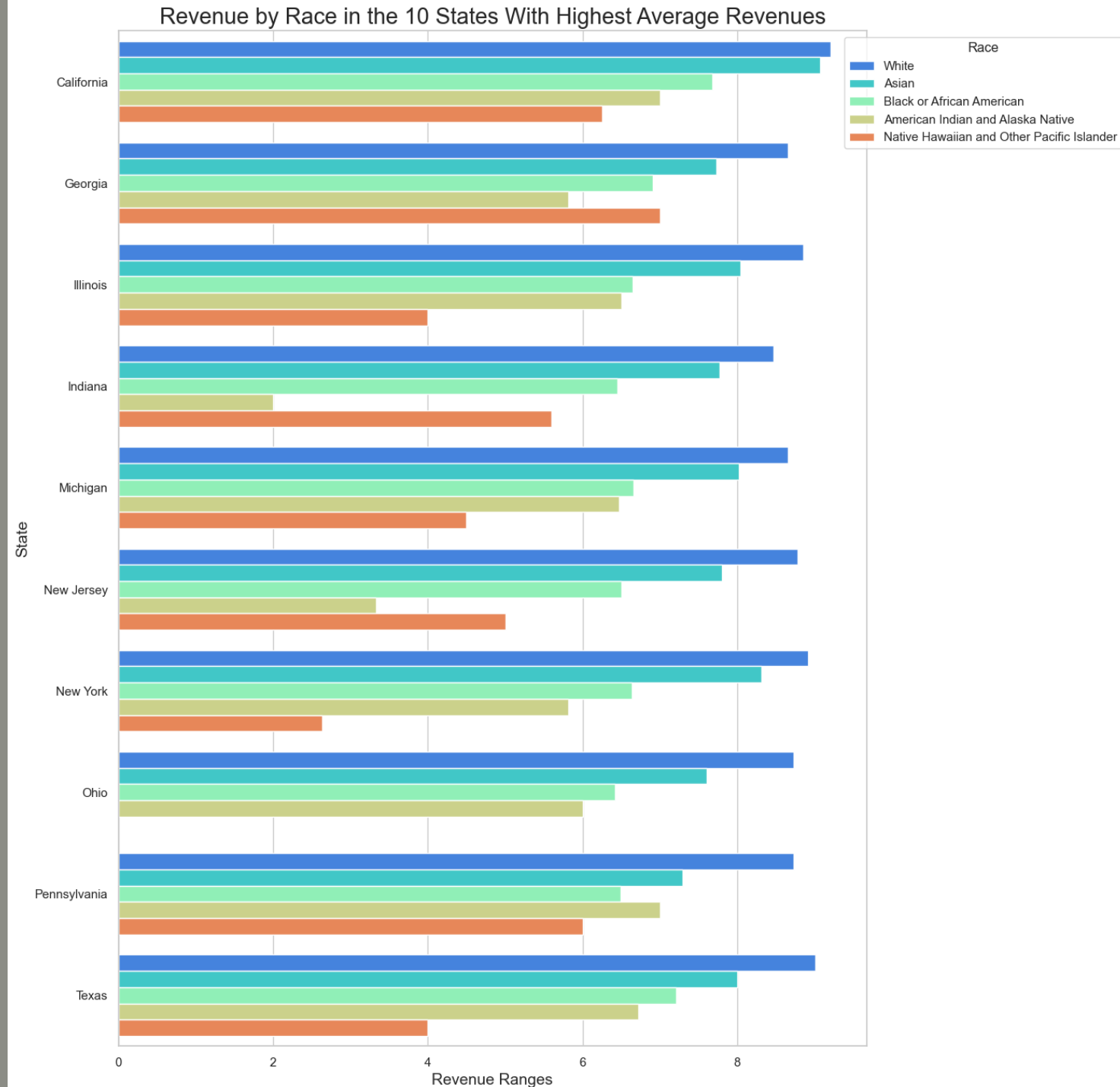


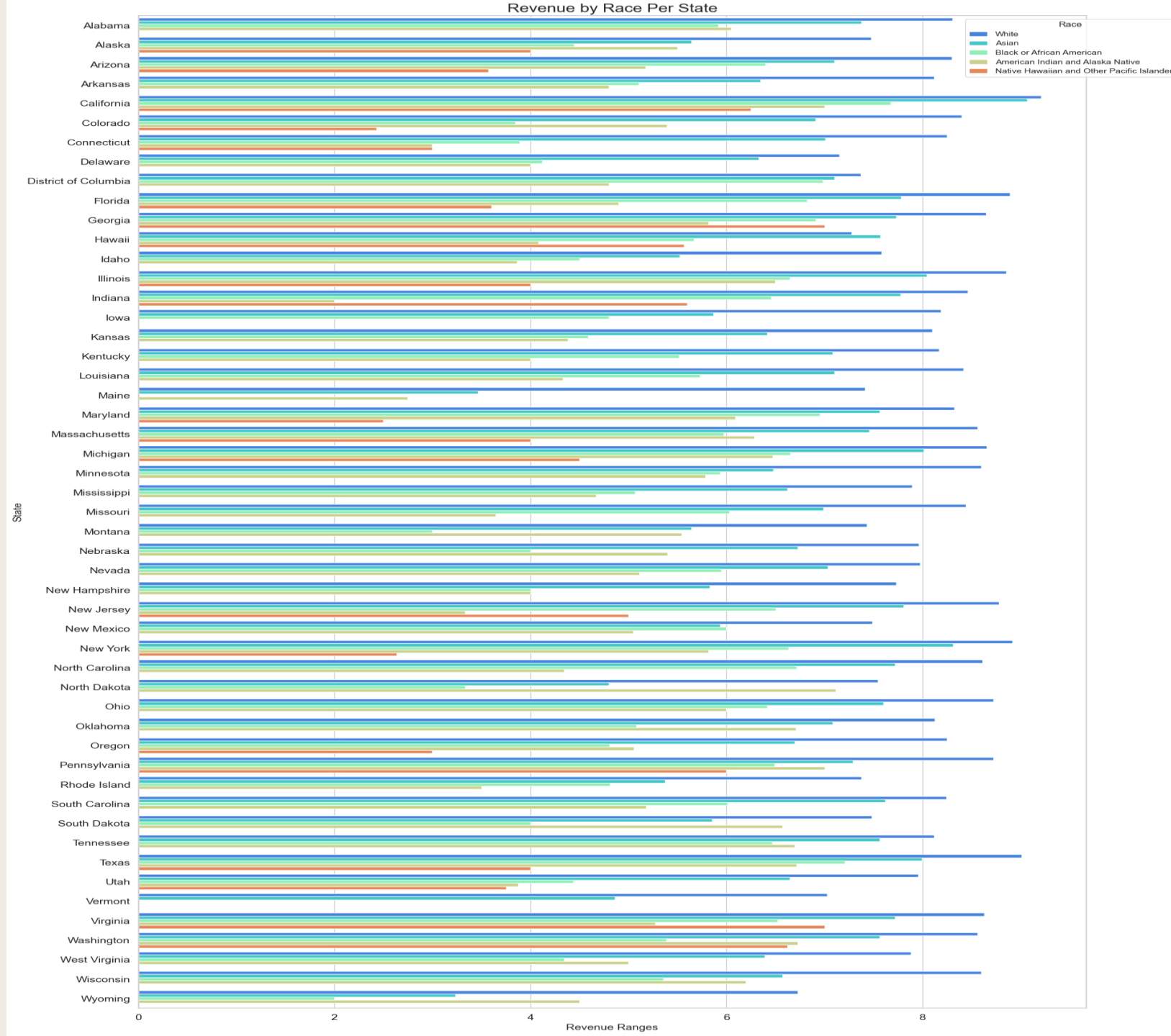
Revenue vs. Race of Owner(s)



Revenue by Race Per State

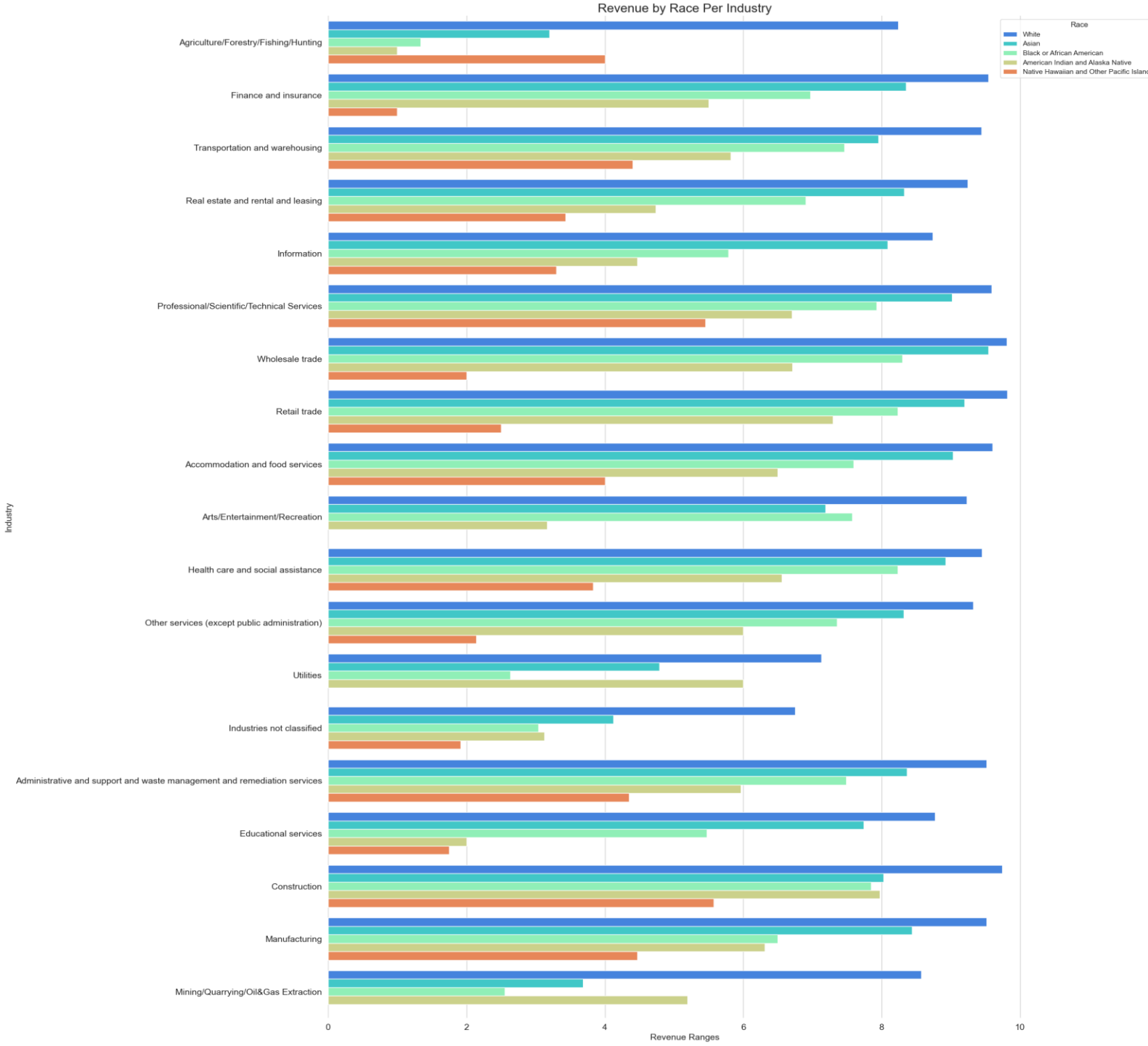
- States with higher average revenues tend to have more opportunities for minority-owned businesses
- California has highest revenues and greatest opportunities for minorities
- Georgia has the most surprising results



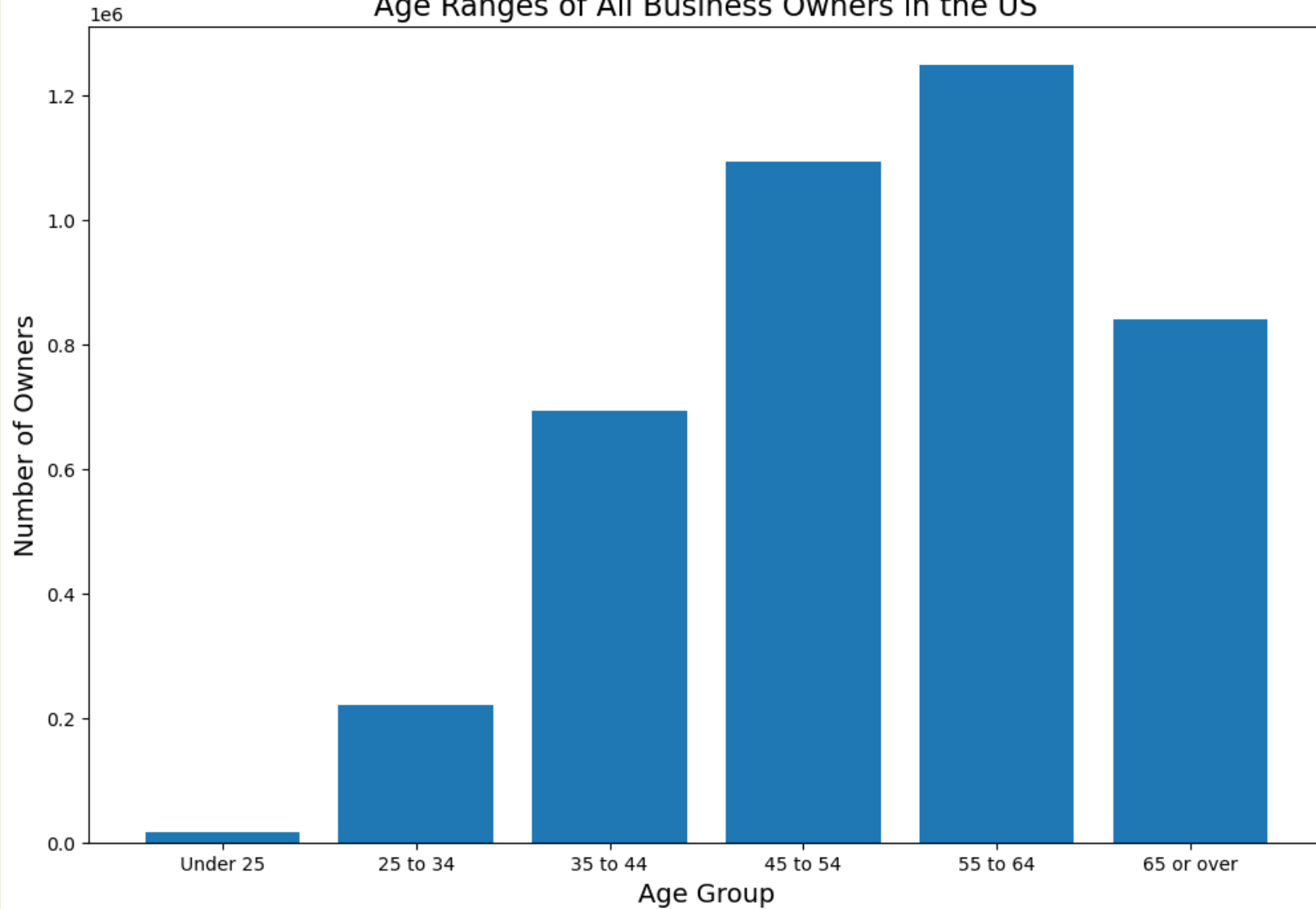


Revenue by Race Per Industry

- Trade, finance, healthcare, and professional service appear to be the best for minorities
- Utilities and Mining are the best for Native Americans
- Still, greater strides need to be made



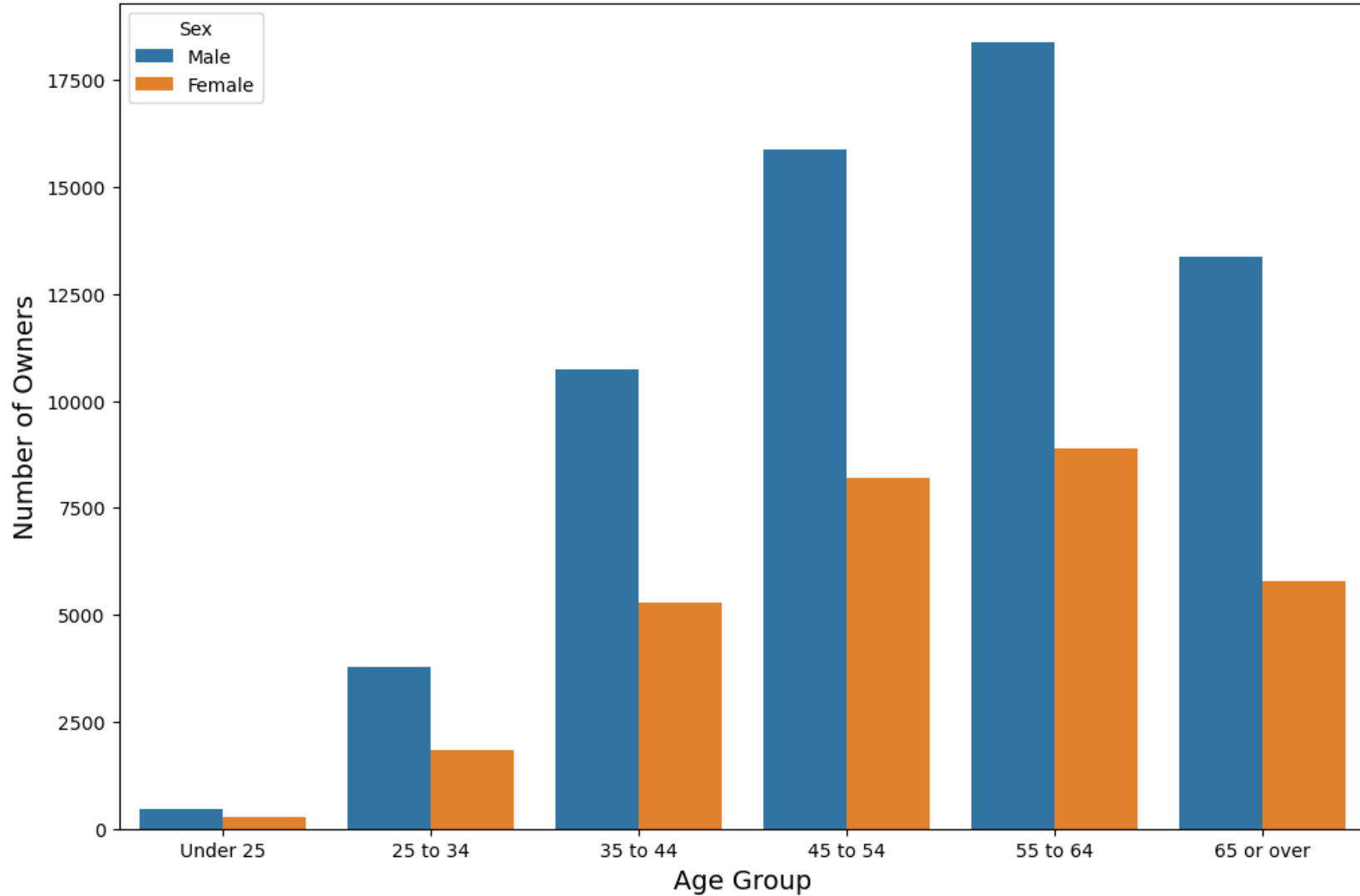
Age Ranges of All Business Owners in the US



Age Ranges of All

- Business ownership increases with age until retirement age
- Includes all industries, ethnicities races and sexes

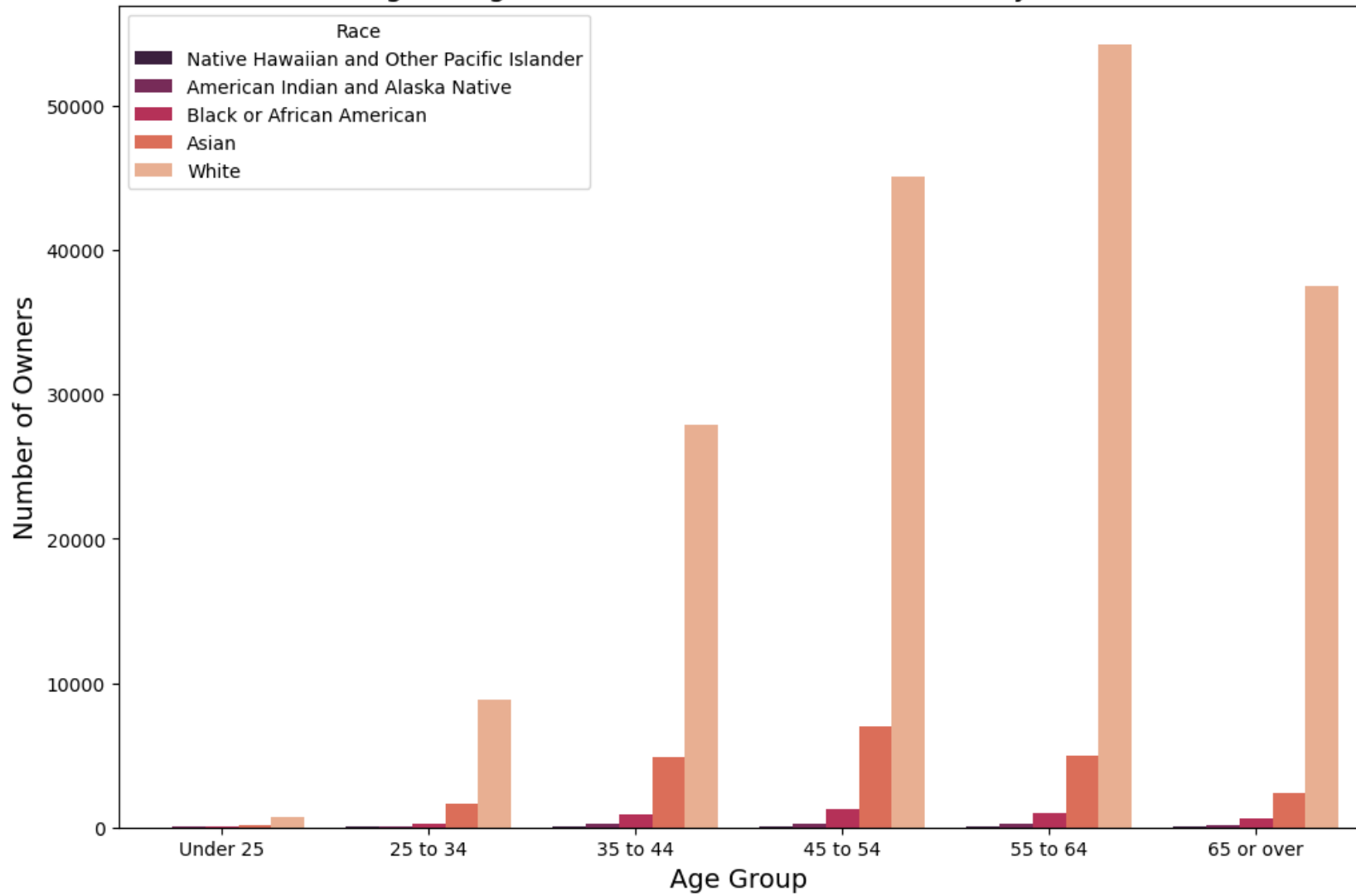
Age Ranges of Business Owners in the US by Sex



Age Ranges by Sex

- In all age groups males own approximately twice the number of businesses than females
- Consistent age distribution with previous chart

Age Ranges of Business Owners in the US by Race

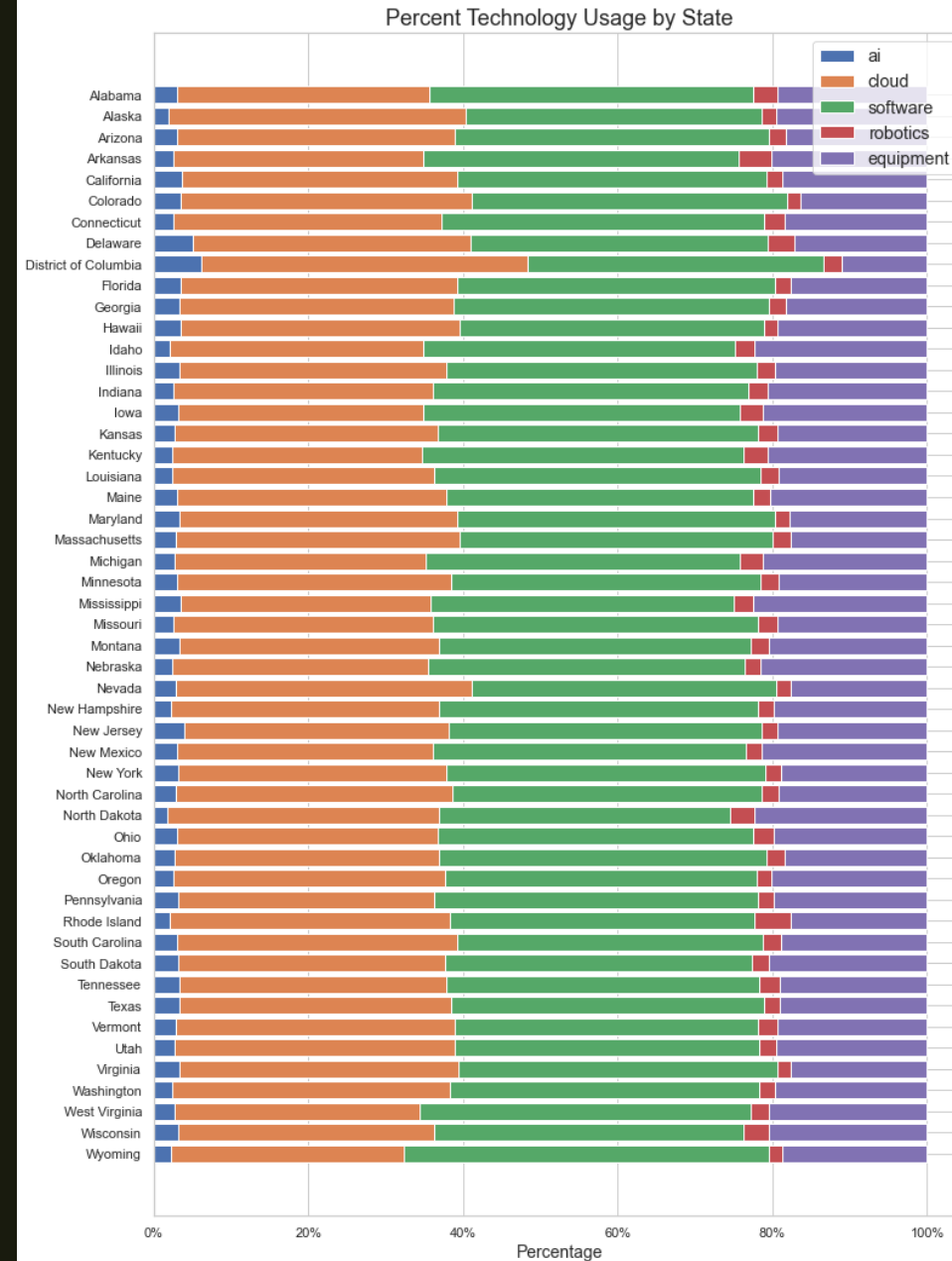


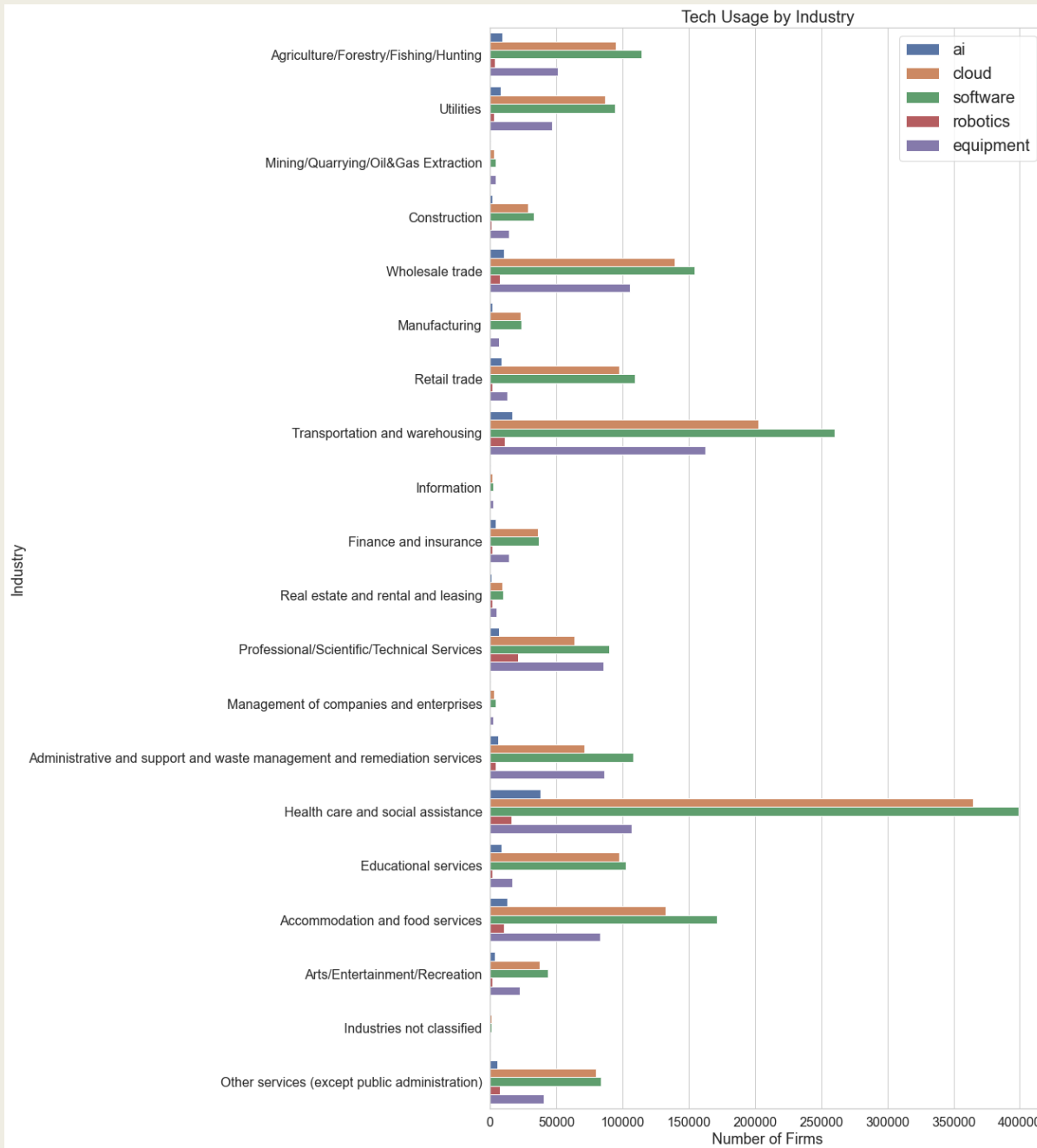
Age Ranges by Race

- Native group populations are a lot smaller
- Business owners are predominantly white
- Age distribution follows previous charts

Technology Usage by State

- Percent usage vs. Total Number of Firms
- Highest AI in DC and Delaware
- Cloud Computing and Specialized Software led technology usages
- Low use of Robotics / Artificial Intelligence
- Will the dynamic change in future years?



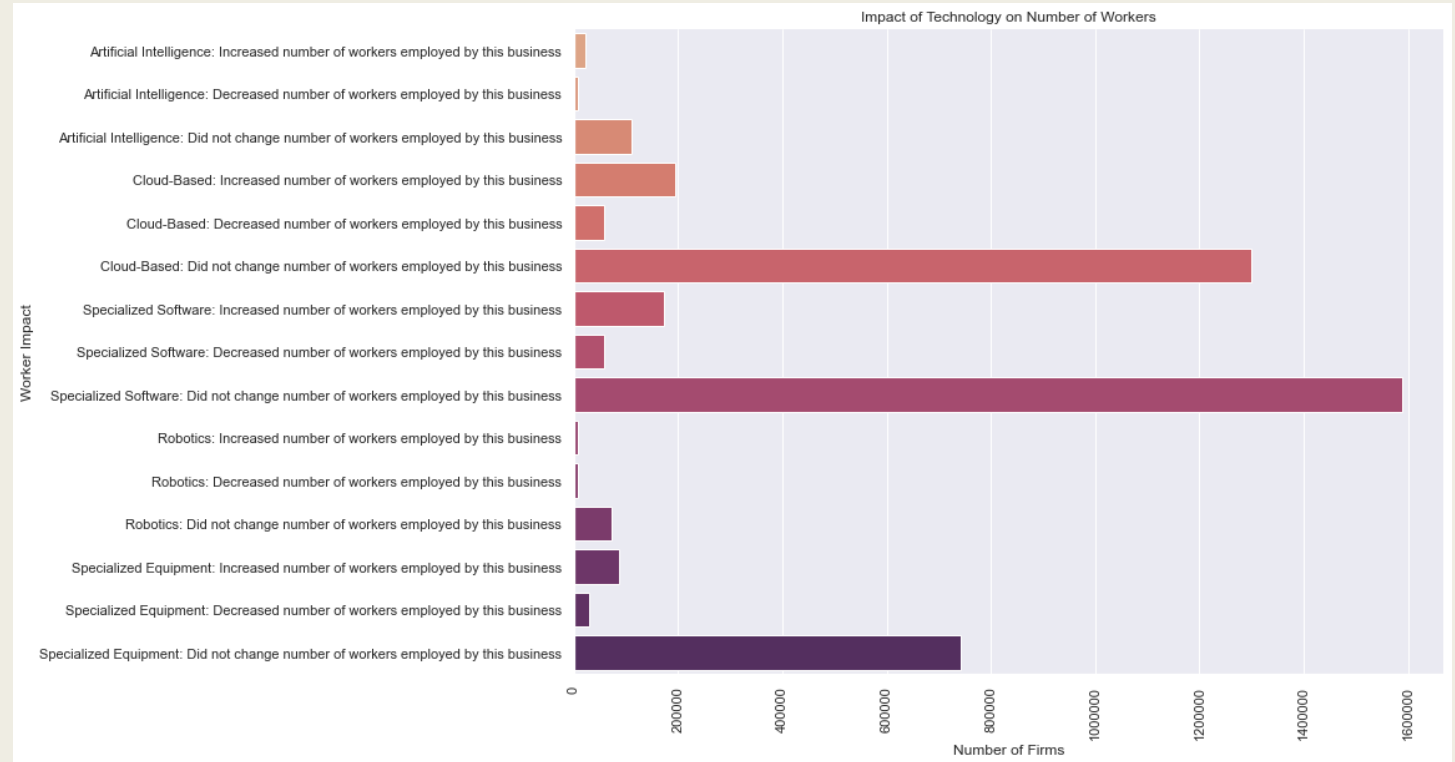


Technology Usage by Industry

- Most industries use Cloud Computing and Specialized Software
- Healthcare industry biggest adopter of Artificial Intelligence and Robotics
- Effect of automation on Transportation and Food services?

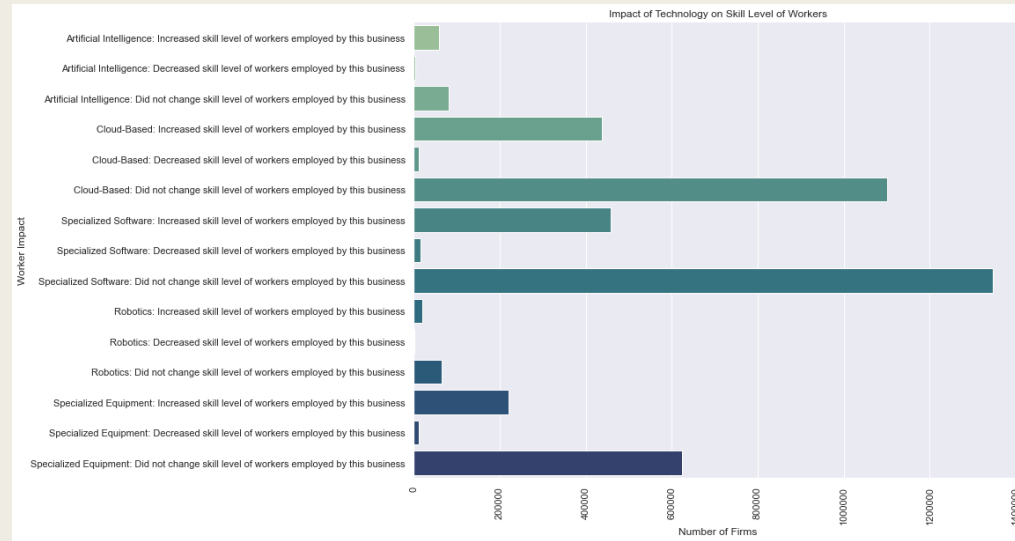
They're taking our jobs?

- Job losses due to technology are outweighed by job gains
- Mostly didn't affect worker count
- Something to watch out for in future years as technology becomes more advanced

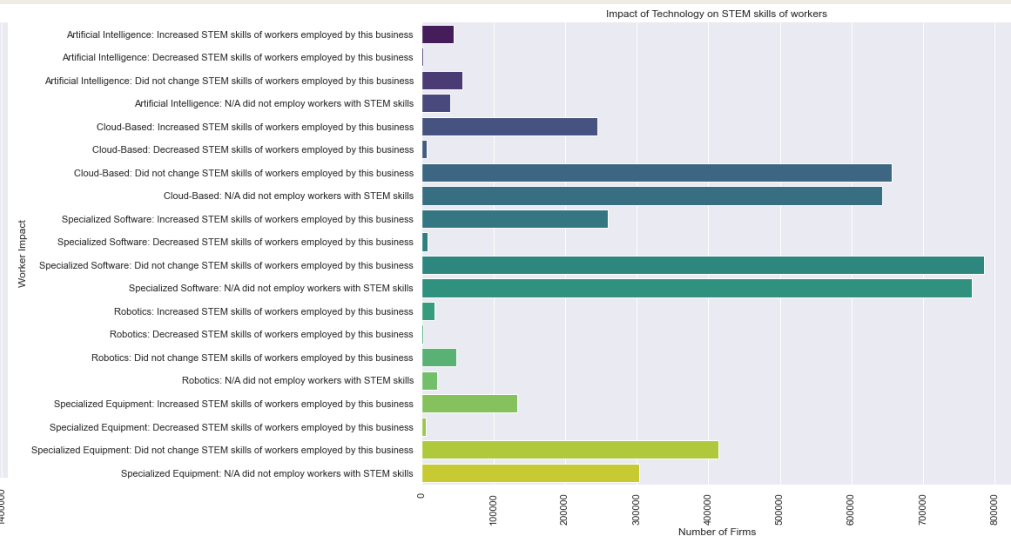


Technology effects on skill level

Overall Skill Level



Stem Skill Level



- Mostly positive impact, or non-impact
- Accessibility increasing as firms have more non-technical employees

Conclusions

- Cloud services and specialized software are widely popular, while artificial intelligence and robotics are not yet
- Technology in business tends to be an overall boost to jobs and skills of workers
- Business owners are predominantly white males in older age groups
- Asian-owned companies are the only minority-owned companies that can remotely come close to the revenues of white-owned companies, but there is still a big gap