

PROJECT PROPOSAL FOR GENDER PAY GAP

Title of Project: Gender Pay Gap Analysis

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OVERVIEW

A. Interest in Domain & Background

One of the topics in the gender pay gap study is the continuation of gender bias, which has been demonstrated in many domains, including STEM fields, where women have made progress but are still less likely to continue a career or be paid comparably to their male colleagues. Diverse leadership teams have been shown to make better decisions. As we recover from the pandemic, it is more vital than ever for businesses to realize the benefits of gender equality. Gender pay disparities must be reported. It displays accountability and gives employers the tools they need to identify and overcome impediments to women's advancement in the workplace.

B. Previous Data Driven Projects Related To Domain

Salary Differences between Occupation

Because people investigating jobs want to know if salaries vary dramatically within the same occupation, the Bureau of Labor and Statistics publishes occupations with large variances in high- and low-earning workers.

(<https://www.bls.gov/careeroutlook/2015/article/wage-differences.htm>)

Job Census per State

The Bureau of Labor Statistics (BLS) compiles a job census for each state long with industry breakdowns. Bureau of Economic Analysis (BEA) uses additional source data and adjustments to create employment statistics that align with BEA's other statistics. These statistics are based primarily on data from the US Bureau of Labor Statistics and the Internal Revenue Services.

(<https://www.bea.gov/data/employment/employment-by-state>)

Average Wage Per State

Due to trade (and monopoly) regulations, a business owner cannot simply inquire as to how much their competitors' staff are paid. Wage survey data should be conducted by a third party and kept anonymous in order to protect business owners from accusations of

wage rigging. This will enable firms to better serve job hopefuls and employees while still adhering to federal wage survey regulations.
(<https://www.bls.gov/oes/current/oessrcst.htm>)

PROJECT OBJECTIVES

Based on the the analysis and research of this domain, we hope to answer the following questions:

- What is the gender breakdown of high-earning workplaces?
- Are attributes like gender, race, and ethnicity a impactful factor in determining pay gap?
- Is credit rewarded to women in the same way that it is to men?
- How is evidence of gender pay gap found?
- What proportion of people change companies in order to see a measurable difference in pay between men and women?

SPECIFICATIONS

- The data will be derived from the downloadable URL:
<https://www.kaggle.com/datasets/nilimajauhari/glassdoor-analyze-gender-pay-gap>
- Data will be collected/ generated using a combination of R language, Matplot, and Python. This data was collected from the Glassdoor's research section from the Kaggle dataset creator. This data is about analyzing the gender pay gap based on various job titles and gender of the job holder.
- There are currently one-thousand (1,000) observations (rows) in the data.
- There are currently nine (9) features in the data.

DESIRED OUTCOME AND IMPACT

Based on the objective statements, we can analyze this data to find evidence of pay gap with varying factors such as gender, race, and ethnicity. The dataset will provide insight to breakdowns between career salary across the board in respect to its department and level of education within these groups.