

UDACITY BUSINESS ANALYTICS NANODEGREE

PROJECT 4 – BUILD DATA DASHBOARDS

1.0 Links

a) Dashboard

https://public.tableau.com/views/UdacityProject4-BuildDataDashboardscorrection1/Summary?:language=en-US&:display_count=n&:origin=viz_share_link

b) Individual Worksheets

- https://public.tableau.com/views/UdacityProject4-BuildDataDashboardsSWS1/GenderSidevs_RateofEmployment?:language=en-US&:display_count=n&:origin=viz_share_link
- https://public.tableau.com/views/UdacityProject4-BuildDataDashboardsSWS2/Populationvs_Poverty?:language=en-US&:display_count=n&:origin=viz_share_link

2.0 Summary

The visualizations first looked at the gender differences across the states (men – women). They then looked, for the top 10 states on each side (more men than women, and more women than men), at how the incomes per capita compare, the average rates of employment, and the possible relationship between total population and average poverty.

3.0 Findings Conveyed

a) Dashboard

- In the dashboard, it was found that just 10 out of the 52 states had more men than women.
- It was visible that out of the 20 states, the top 2 with highest average incomes per capita had more women than men. The top 5 was completed by 3 states with more men than women. The bottom 5 featured 3 women-sided and 2 men-sided states.

b) Sheet 1 (SWS 1)

The states which had more men than women had a comparatively higher overall average rate of employment at 46.93% (with a maximum of 52.8%, a minimum 4.63%, and a range of 11.17%) as compared to 43.81% for the top 10 states which had women than women (with a maximum of 51.01%, a minimum of 38.16%, and a range of 12.85%)

c) Sheet 2 (SWS 2)

This sheet revealed that with a maximum total population of 6 million, states which had more men than women were more likely to see increases in their rates of poverty as their populations increase. The top 10 states with more women than men were fairly spread apart, with a weak positive relationship between total

population and total poverty. The trend lines give further insight into the possible trajectories for the groups.

4.0 Design

- Pink and blue were used throughout to maintain consistency whilst keeping it's core function of differentiating the states which had more women than men (pink) from those which had more men than women (blue)
- A state filter was also used throughout to limit the states presented to the 20 states in question.
- A bar chart was used in the dashboard to show the extent of the differences between the States (quantitative and categorical data)
- The circle views were used to show how the income per capita of the 20 states compared to each other on the same scale. This made it easier to see how the states performed since the differences were not that wide in some cases, making other visualizations such as the bubbles difficult to read.
- A scatterplot was used here as the objective was to examine a possible relationship between two quantitative variables (population and poverty). The trendline was added to make it easier to see the direction and magnitude of the correlation.

5.0 Resources

- a) Reviewer's required changes rubric
- b) Reviewer's suggestions on visualizations