

DATA VISUALIZATION WITH TABLEAU - BUSINESS PROJECT

By Vinish Vincent



Great Learnings
PGP-DSBA - 23

Table of content

Business Context:

We are all aware that accidents are prone everywhere due to negligent driving or climatic conditions. An insurance company always needs to be prepared to estimate the number of accidents and the claims that they can receive at a given point time. Also understanding the pattern of claims would help the companies to frame different types of policies for the users providing better benefits and at the same time increasing the premium to the company

Problem Statement:

Consider that you are a Lead Data Analyst at an Insurance Claims company that has provided you with the Car Insurance Claims dataset. You have been given a task to explore the data, create different plots and interpret useful insights/findings. Your end goal here will be to create a storyboard that you have to present to the Senior Management and the story has to have an end objective and should follow a logical flow to display that you are heading towards achieving the end objective. This will help the Senior Management in taking some decisive actions on the current claims system in place. This storyboard will be an open-ended story for you to explore various different features in the data and try to showcase different plots. Make sure to have minimum clutter in the plots, follow a consistent color scheme across all the plots, and use proper colors to highlight a specific insight. Moreover, your plots on all the dashboards should be interactive and responsive. There should be 1 dashboard that should cover the summary of the story as well as your recommendations.

Problem Statement

Insights:

- The most common professions are blue-collar and clerical roles.
- Customers in highly urban/urban areas tend to have higher incomes.
- Doctors earn the highest incomes (average income), while homemakers earn the lowest.
- Unmarried men have a higher average income.
- The age of vehicles tends to be greater in urban areas.
- The average insurance claim amounts fall within 60% of the previous average claims across all professions.
- Customers with less than 5 years of work experience tend to have higher claim amounts.
- There is a higher frequency of insurance claims among females compared to males.
- Customers are filing claims that exceed the actual value (bluebook) of their vehicles, resulting in the insurance company paying more than the vehicle's actual worth.
- The average claims for cars are higher among students, blue-collar workers, clerical staff, professionals, and homemakers.
- Claims tend to be higher for vehicles used for commercial purposes.
- Overall, panel trucks have the highest claim amounts, while minivans have the lowest.

Recommendations:

- It's possible to provide more insurance policies tailored to students and individuals with under 4 years of work experience.
- To retain current customers and attract new ones, offering specific discounts is an option.
- Discounts can also be provided based on the customer's educational background and profession.
- SUVs and Minivans exhibit the highest claim percentages, necessitating mandatory inspections for these vehicle types.
- Considering the higher average income in urban areas compared to rural areas, an increase in insurance premiums for urban residents is warranted.
- Vehicles utilized for commercial purposes are also susceptible to higher claim amounts.

Tableau public Link:

https://public.tableau.com/app/profile/vinish.vincent/viz/DVTAssignment_CarInsuranceClaims_VinishVincent_092023/InsuranceClaimsStory

Thank you