**INSIGHTS ON CAR INSURANCE CLAIM**

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# 1 Project Overview

We are expected to build the story using Tableau on the car claim insurance dataset which contains 21 variables. Multiple dashboards and visualizations has been created on the dataset and it has to be bounded as a story board in the form of visualizations and the inference to be mentioned in the story option

# 2 Submission Link – URL

[https://public.tableau.com/views/DVTMANSURALIA/Story1?:embed=y&:display\_count=yes&publish =yes&:origin=viz\_share\_link](https://public.tableau.com/views/DVTMANSURALIA/Story1?:embed=y&:display_count=yes&publish=yes&:origin=viz_share_link)

# 3. Executive Summary

The storyboard contains 12 story captions which explains the insights on car insurance claim dataset

## Story Caption 1: - An overview on Car claim insurance

The dashboard contains filters, doughnut chart and Tree map.

Filter has been applied for all the demographic variables of car insurers, doughnut represent the claims based on marital status, occupation and gender wise and the tree map represent the car type

## Insights

* Unmarried claims more
* Occupation wise - Blue collar workers claim more
* Female claims more  SUV’s claim more
* Filter’s applied on the caption 1 is connected to all three maps and it changes dynamically based on the filter options selected

## Story Caption 2: - Overview of claim

The dashboard contains Cross tab, bubble chart and horizontal bar chart

Parameter has been used for the variable of interest such as occupation, car use and gender

Parameter has been used for the variable of interest Top N Claimants

Cross tab is hierarchical with city and attribute parameter versus education. Bubble chart represents the occupation and its total claim. Horizontal bar chart represents the TOP N claimants and their total claimed amount

## Insights

* Rural high school bachelors claim high and in the urban PhD claims the least
* Top N claims visualize the claim amount for the number specified
* Blue collar claims the highest amount

## Story Caption 3 Demographic profile of the Insurer’s

The dashboard contains Line chart, Bar Chart and Lollipop chart

Charts has been developed on the demographic variables of car insurers say age of the insurer (driver age), gender, car driven location (urban city) and their education status. Line chart represent the age of the insurer, bar charts for urban city and gender and lollipop chart highlights number of records in each educational categories

## Insights

* Age of the insurer is normally distributed
* Large number of people are in the age group of 50-70
* Number is very less in the group of people whose education qualification is less than high school which represent the literacy profile of the country
* Large chunk of people are bachelors and high school education qualification
* Cars are driven largely in urban compared to rural
* Number of females are little higher than the males in the dataset

## Story Caption 4: - Average amount per Claim Vs Car Age, Car Type & Income

The dashboard contains bubble chart, line chart and horizontal bar chart

Visual filter has been applied to the dashboard. Line chart is being represented by car age versus average amount per claim, bubble chart for the car type and income in the horizontal bar chart versus the average amount per claim

## Insights

* Claim is higher for old cars in the segment of SUV
* In the van segment claim is highest for the new cars
* Income range of 50k -100 k claims the highest

## Story Caption 5: - Age of the Car, Driver & Insurance Vs Claim

The dashboard contains Line chart and Horizontal bar chart

Charts has been developed on the age of the car, insurer(driver) and insurance age versus the respective claim. Line chart represent the insurance age and car age with respective to its claim. And the bar chart represent the age of the cars vs insurance claimed.

## Insights

* New age cars claim more and the highest
* And the claim is also high in the car age group of 6-12
* Claim is high in the insurance age bracket of 10 to 14
* Insurers in the age range of 55-70 claims more

## Story Caption 6 Occupation, Car use and Gender Vs Claim

The dashboard contains vertical bar chart

Parameter has been used for the variable of interest such as occupation, car use and gender

Claim amount is represented in Y and frequency of the claim in X and the demographic variables is being attributed using the parameter

## Insights

* Blue collar and clerical claims the highest in the occupation and doctor claims the lowest
* Private claims more than the commercial used cars
* Female claims more and the claim frequency of 1-3 claims more

## Story Caption 7: - Car type drilled down to use, gender & Urbanicity Versus Claim

The dashboard contains horizontal stacked bar chart

Car type drilled down to use, gender and Urbanicity versus claim has been represented in all three horizontal stacked bar chart

## Insights

* Female claims the most in the segment of sports and SUV Cars
* Urban claims more than the rural across the car types
* Cars used for private purpose claims the most than the commercial users

## Story Caption 8: - Family Status Vs Claim

The dashboard contains Horizontal bar chart, pie chart and line chart

People who are married and whether parents staying with him and their respective claims is in vertical bar chart using hierarchy. Pie chart contain the claim amount of the respective genders and the line chart represent the claim status versus the number of kids the insurers have

## Insights

* People who are married but parents are not with him claims more
* People who are not married and also not with their parents also claims more  Female claims more than male

People who don’t have kids at home are claiming the highest may be representing the culture of the country where the concern and saving for kids in the form of insurance is less unlike India

## Story Caption 9 Value of Book, Home & Travel Time by Gender Versus Claim

The dashboard contains Circle views, Scatterplot and Continuous Area chart

Circle views is being represented by book value vs claim drilled down to car type, Scatterplot represented by home value and total claim drilled down to gender and the continuous area chart represents travel time and total claim drilled down to gender

## Insights

* Female travel less claims more
* Book value is higher for female and claims more
* Less the home value lesser the claim across gender

## Story Caption 10: - Claim Frequency Vs Claim

The dashboard contains Line chart and highlighted table

Claim frequency versus the claimed amount and Claim Frequency versus car age is represented by line chart and the highlight table contains claim frequency versus the number of claims for the different car usage

## Insights

* Lower the car age higher the claim
* Lower the claim frequency higher the claim iterates the usage of insurance claim for the new cars
* Private used cars claim more but the frequency of the claim is less

## Story Caption 11: - Gender + Education Vs Claim, Gender + Occupation Vs Claim

The dashboard contains Vertical bar chart

Vertical bar chart contains education and occupation in the X, claims been captured in the column bar splitted by gender in the chart

## Insights

* In both gender, people who completed high school education claims more and female high school graduate’s claims more than male high school graduates
* In both gender, PHD claims lesser
* By occupation, blue collar claims the highest among both genders

**Irrespective of the gender**

1. Higher the education Lesser the claim
2. Doctors claimed less than any other profession

## Story Caption 12: - Car type, Occupation Versus Claim & Distribution of Claim

The dashboard contains Box and Whisker plot and Histogram.

A Box and Whisker plot is created for Cart type and Occupation Vs Average amount claimed per claim. Distribution of total claims made by customers is viewed with the help of histogram.

## Insights

* Distribution of the Total Claims made by customers are Skewed to right.
* Independent of Car type and Occupation more number of people claim than the range of claimed amount.

## Conclusion

Data Visualization module has been executed the visualization procedure as a project on the car insurance claim dataset. Dashboards and visualization has been developed using the functionality of tableau to create a visually appealing storyboard which is used to visually analyze the insights hidden in the dataset