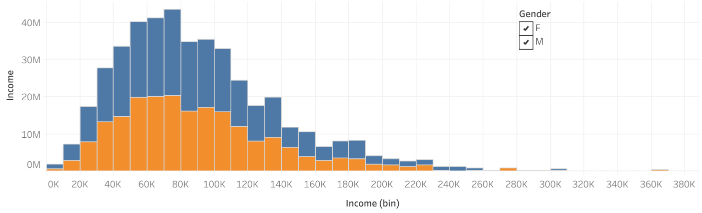
DVT_InsuranceClaims_AmbrishVerma

DVT - Income distribution of custo..
Income Vs Claims
Claims - more information
Insights into travel time
Profitability
Best and worst customers
Insights and recommendations

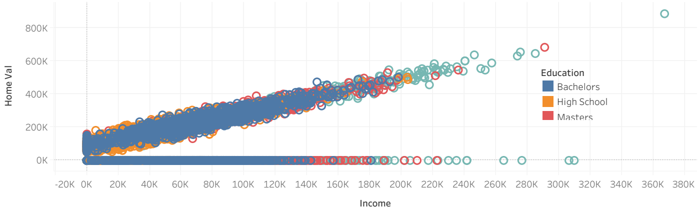
Data Visualization Project using Tableau: *Analyze the car insurance claims dataset that are submitted to the company and provide the insights.*

1. This dashboard shows the income level of the customers of the insurance company.
2. The income of the customers is normally distributed and is skewed towards right.
3. Both the genders are almost fairly spread over the income range available in the data set.
4. Education level of the customers split into 4 categories provides following insights:
a. Customers having PhD degrees have better income level than the rest.
b. High school graduates and bachelors are more concentrated towards the income range of 0-100K.
5. Median income versus Years on Job follow a normal distribution, skewed towards left.
a. The income generally reaches a peak at around 12 years in the job.
b. Overall, the number of individuals working in the urban centres vastly outnumber those in the rural areas.

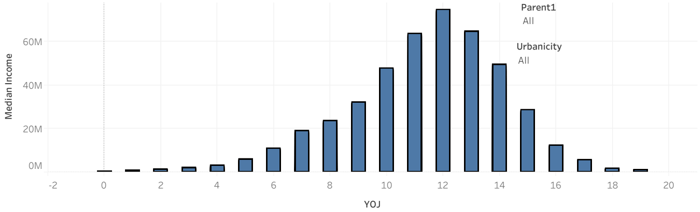
Income_Distr



Income_House_Education_correlation



Income_Vs_YOJ



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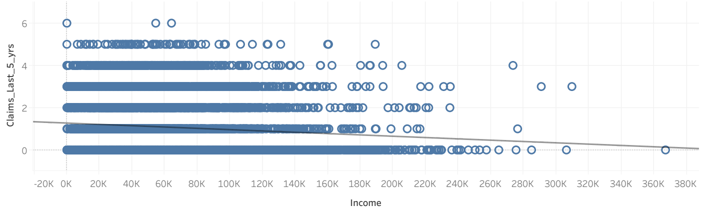
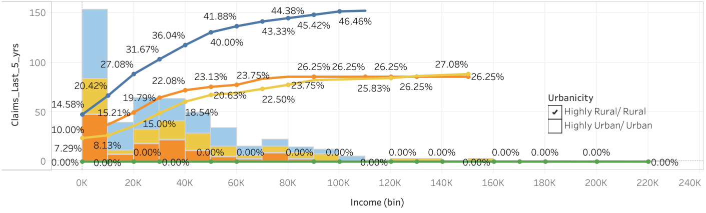
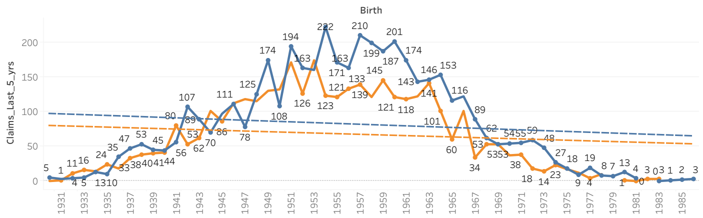
Income_Vs_Claims



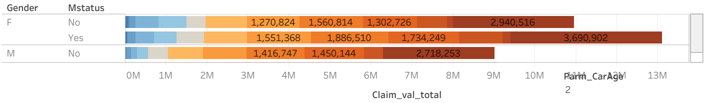
Claim_Income_Urban_Rural



Cust_Age_Gender_Vs_Claims



Claim_Gender_MStatus



1. There is a downward trend in claims with respect to income. A the income increases, the number of claims shows a decrease.
2. 21% of total crashes that happen in the urban centres, are in the first year of the cal age. In rural areas, ~40% of crashes happen in the first year.
3. In the line chart, following are the insights:
a. Of the cusomters born after 1951, females are more likely to submit a claim and for the higher value than the male customers.
b. This likelyhood holds strong till the the customers who are born in the year 1974.
4.
a. Females are more likely to retain a car for a longer period of time. ..

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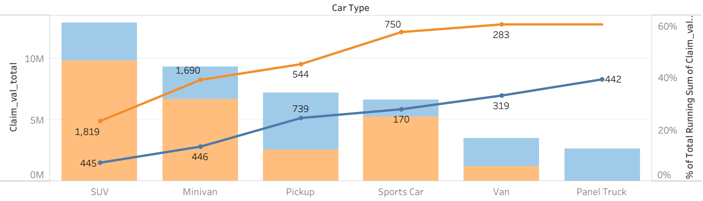
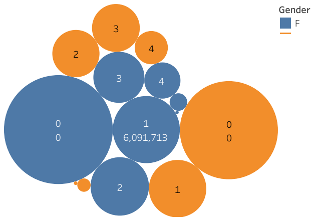
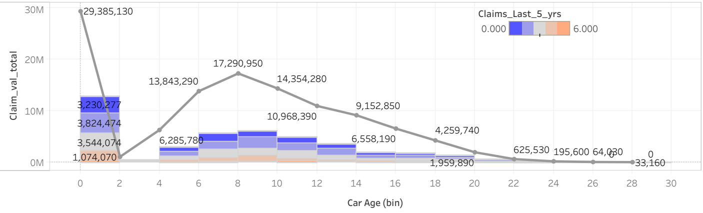
Car_Usage_Vs_Claims



Claim_Freq_Value_Vs_Gender



CarsValue_Vs_ClaimValue



Car_Type_Vs_Car_Use

	Car Type					
Car Use	Minivan	Panel Truck	Pickup	Sports Car	SUV	Van
Commercial	446	442	739	170	445	319
Private	1,690		544	750	1,819	283

Car Use, Measure Names

- 🟦 Commercial, % ..
- 🟧 Private, % of To..
- 🟦 Commercial, Cla..
- 🟧 Private, Claim_..

1. SUV cars are used primarily for personal use whereas Panel Truck are used only for commercial purposes.
2. Insurance claims are mostly submitted for sports car and SUV if it is for personal use and for panel truck and pickup truck.
3. The claims by females are more than males for every claim that is submitted by 20%-40%
4. The ratio of Total Car value to Total claims submitted is 2.5 times in the first year. It drops sharply in the next year before starting to increase again.

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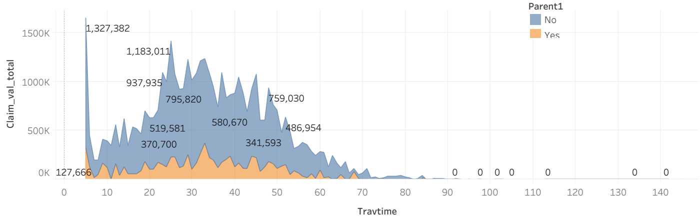
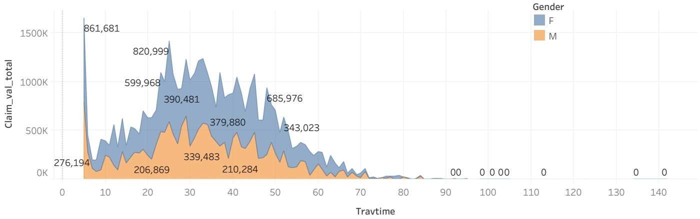
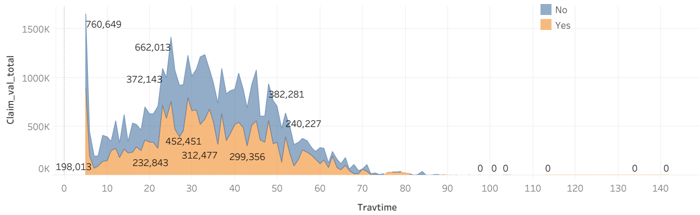
Traveltime_Vs_Claim_Parent



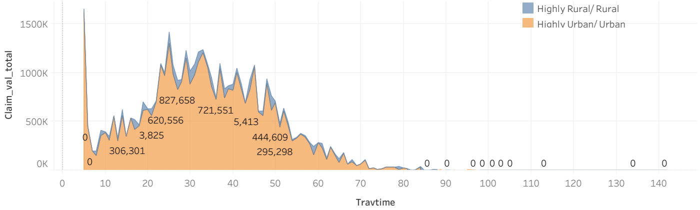
Traveltime_Vs_Claim_Gender



Traveltime_Vs_Claim_MStatus



Traveltime_Vs_Claim_Urban_Rural



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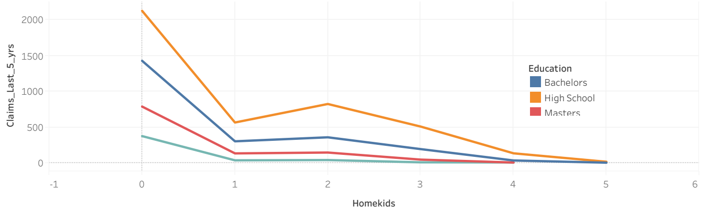
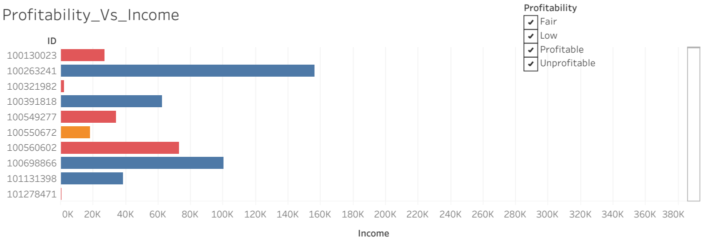
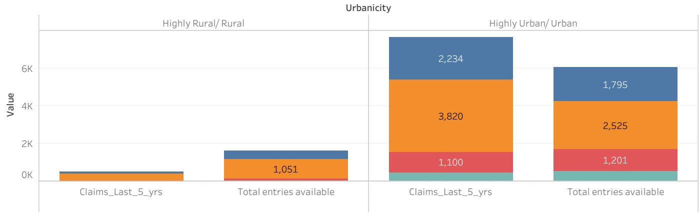
HomeKids_Vs_ClaimFreq



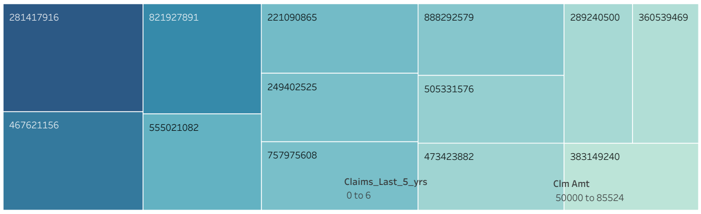
Profitability_Vs_Income



Claims_Distr_UrbanCity



Costliest_Customers



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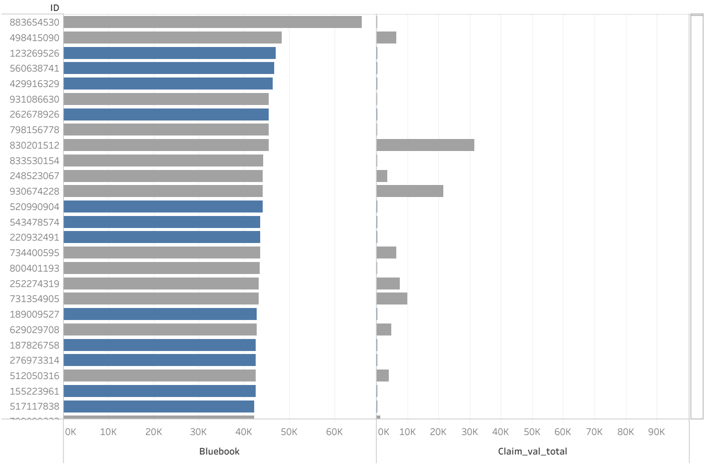
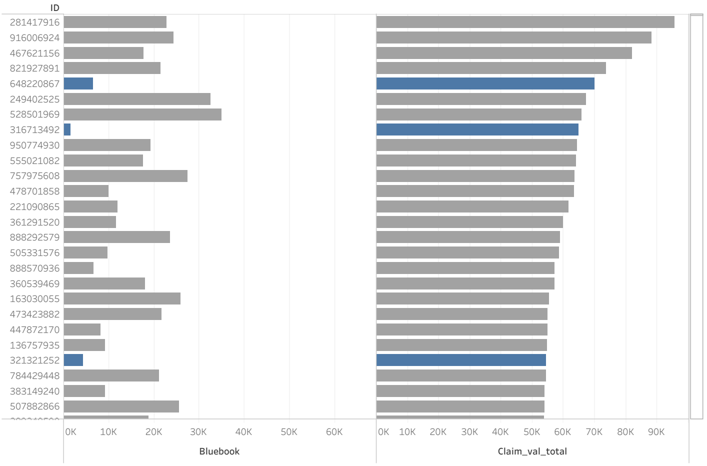
Best_Customers

TopValues 2,000



Loss_Making_Cust

BottomVal.. 1,000



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Insights summary:

1. The Income range of the customers have an impact of the claims that are submitted. After the income of ~200K, the number of claims start to decrease per customer along with the value of the claim.
2. The number of claims and the amount of claims also decrease if there are kids in the house.
3. If the individual does not own a house, then the chances of a claim being submitted in the future is higher.
4. The first 5-10 minutes of the travel time are the most susceptible for crashes. Long drives tend to be safer.
5. The number of claims before the car turns 2 is significantly higher than any other year for the car.

Recommendations:

1. Increase the insurance premium for the customer who use the car for shorter commutes.
2. If the customer has kids, there is a better chance of crash not happening.
3. If the customer owns a house, he/she can be incentivized.
4. In the Rural area, the numebr of claims submitted in the last 5 years is much lesser in proportion to the corresponding number of claims in urban centres. Hence, rhe rural customers can be incentivized as long as they are using the cars for longer commutes(more than 10 min).
5. An awareness campaign educating the drivers of the probability of crashes in the initial 5-10 minutes may help reduce the number of crashes.
6. The more highly educated the customer, the lesser chances of him/her undergoing a crash(both in Urban and Rural centres). Hence, such customers should be incentivized.
7. Insurance for loss making customers should be increased and for profit making ones should be discounted.