TABLEAU PROJECT REPORT

DSBA

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Business Context

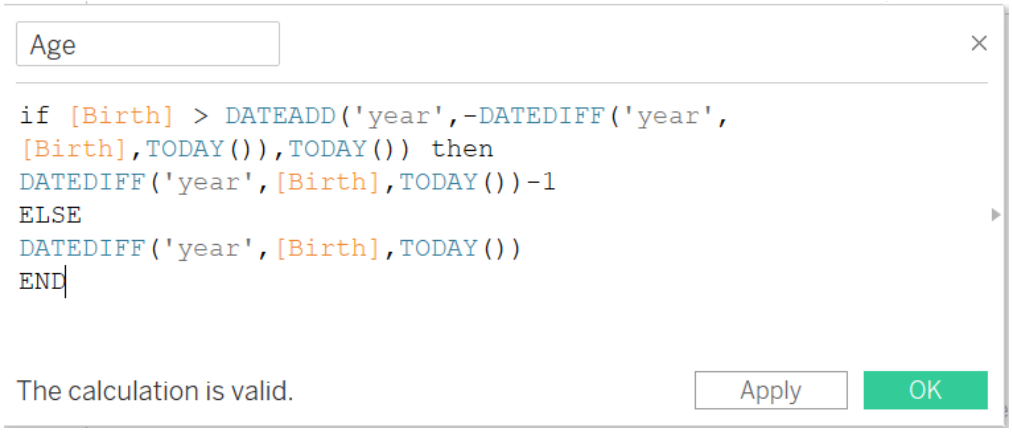
We are all aware that accidents are prone everywhere due to negligent driving or climatic conditions. An insurance company always needs to be prepared to estimate the number of accidents and the claims that they can receive at a given point time. Also understanding the pattern of claims would help the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

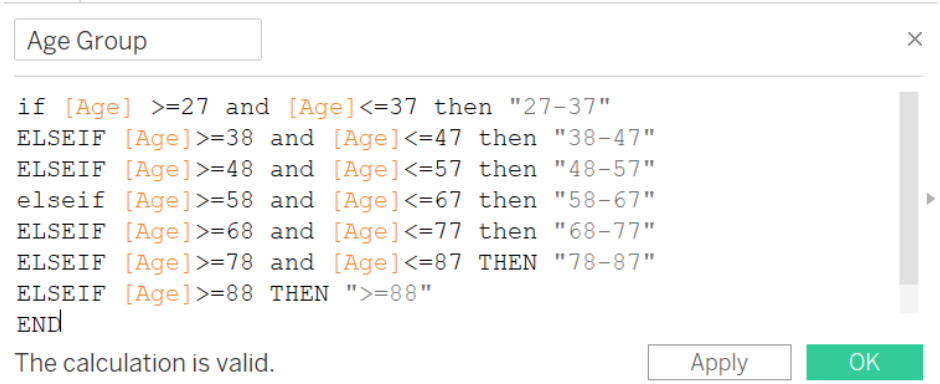
Problem Statement:

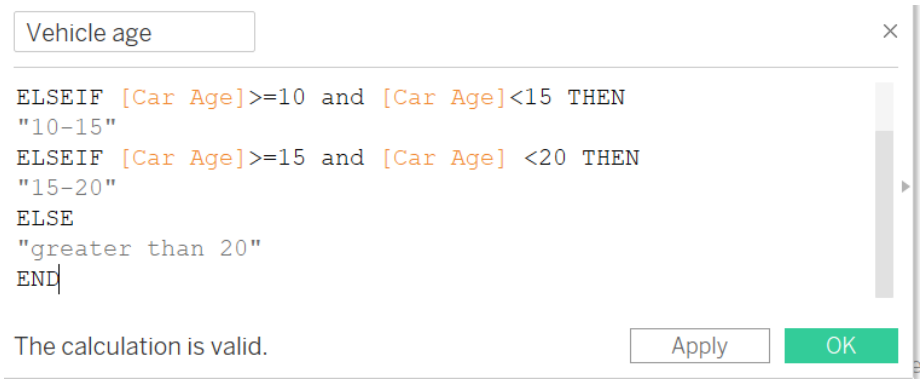
Consider that you are a Lead Data Analyst at an Insurance Claims company that has provided you with the Car Insurance Claims dataset. You have been given a task to explore the data, create different plots and interpret useful insights/findings. Your end goal here will be to create a storyboard that you 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.*

Assumption	Car Owner and Driver are same Amounts are in Dollars ($)
ID	Identification Variable
KIDSDRIV	Number of teenagers among the car owner's children who can drive a car.
BIRTH	Date of birth of the driver
HOMEKIDS	No of childern the car owner has
YOJ	Years on Job. How many years has the owner of the car been working?
INCOME	Income of the driver
PARENT1	Is the car owner a Single Parent
HOME_VAL	Value of the house owned by the car owner
MSTATUS	Marital status of the car owner
GENDER	Gender of the driver
EDUCATION	Maximum Education level of the driver
OCCUPATION	Occupation of the driver
TRAVTIME	Time taken to get to work on an average
CAR_USE	Purpose of using the car
BLUEBOOK	What is the worth of the car. Value of the Vehicle(in dollars)
CAR_TYPE	Car type
OLDCLAIM	Total claim (in past 5 years - in dollars)
CLM_FREQ	Number of claims (in past 5 years)
CLM_AMT	If car was in a crash, what is the currently claimed amount(in dollars)
CAR_AGE	Age of car
URBANICITY	Where the car is being driven primarily

- **Constructing custom calculation fields for data processing:**







SUMMARY

1) From the data we can clearly understand that most customers are long term female blue collar workers who love their SUVs and minivans.
2) The clients who earn the most are blue collar job holders, managers, lawyers, and doctors from urban or highly urban areas.
3) The clients who own panel trucks have the highest average income belonging to the urban/highly urban areas while the highest claims are made by SUV owners
4) The clients with high school and high school education, no children, and a vehicle that's less than ten years of age made the most and expensive claims. The actual and estimated claims were way apart pointing out that there is a huge margin of error that's in need of immediate attention.
5) Minivan owners had the best bluebook value and also made the most claims while SUV owners came in second only beating minivan owners with their average home value.
6) The 68-77 age group was the major set of people who contributed to the client list minivans and SUVs seem to be the most prominent choices for males and females respectively.
7) The income of women are more as compared to men's.
8) The vehicle is preferred more as private rather than commercial for clients.

SUGGESTIONS

1) The insurance costs for SUVs, pickup trucks, minivans, and panel trucks are the bread earners for the company and should be focused solely on more for growth.
2) Posting ads and promos for sales and discounts strategically targeting lower-performing demographics can aid in increasing the number of new customers.
3) Cheaper insurance premiums for people who make less should be considered because it can bring in a lot of new customers.
4) The bluebook value weightage should be reconsidered to reduce the rate of the car per its age to minimize significant financial risk.

5) Insurance for older vehicles should be a little cheaper than for newer vehicles.
6) Targeting customers with a high level of education, income, and occupation will boost sales significantly.
7) Consumes with higher past claims and higher frequency should be charged higher premiums to curb losses and cap rebates.

Solution link:

Saumya Jain Data Visualization using Tableau | Tableau Public