Visualization Design

Who, What, Why and How

Summary

Sue intends to buy a vehicle. She has a list of ten potential vehicles available for purchase. She has expressed certain criteria that are important in her decision. Using the vehicle data and the Sue's priorities, we want to provide **one or more recommendations** on which vehicle best suits her needs.

Who

Our audience is a single person, Sue, who wants a vehicle for her and her family

Persona 1 - Sue

"I prioritize the safety of our family. I would love to find a vehicle that won't cost us much along the time and is big enough for us, including our little dog." - Sue

Sue uses will use the vehicle every day in the city and on long-distance trips on the weekends.

Sue is 40 y. o., female, lawyer

Her goal:
- Buy a good vehicle that fits her needs

Needs:
- A perfect vehicle:
  - is safe
  - is efficient for city and highway
  - has enough storage considering:
    - 3 persons and a dog
    - Long-dist. visits to family and camping

Attributes:
- Does not have time for details, she trusts the company
- Prefers data-driven decisions
- Likes to see trends
- Likes to interact with the visualization

Presentation:
- We will have a 1-to-1 meeting
- I will give an overview of results and guide her to interact with the visualization

What

Data Sources - Table with 10 vehicles' attributes.
Data Quality - One <u>missing value</u>; true information was imputed to fix the problem:
- Forde Edge SEL with Engine 3.5L has <u>HoursePower = 285 HP</u>
  - https://www.ford.com/services/assets/Brochure?make=Ford&model=Edge&year=2013&postalCode=4

Data Timeliness - The data is considered updated.
Table setup:
To track the cost of using the vehicle along the next years using trending lines, I created one new variable.
For each year, a new row is added to the table, so that Tableau can handle with the data properly.
- <u>Years of Usage</u>: values from 0 to 9, indicating the next 9 years of usage.

Why

Goals – To determine:
- Which is the safest vehicle?
- How total cost of each vehicle express over the years?
- What are the vehicles with enough room for her family and trips?
- What are the 2 to 3 best options for her to decide?

Intended Outcome – Have a good vehicle to:
- Use as a primary mode of transportation;
- Use to visit her family in a distant city and go camping;
- Bring her dog with them;
- Go to work, supermarket, pool, etc;
- Use the vehicle very frequently, reaching around 25,000 km per year;
- Wants to sell the vehicle when reaching 250,000 km.

How

Format(s) - Interactive dashboard and a 1-to-1 meeting. We may interact and perform some filters during the meeting.
Presentation Vehicle – Tableau.