**Compare and shopping for company car**

Based on the research I did and all the data collection. I have concluded that 2019 Honda CR-V is my best option for shopping a car for my company. First, I would like to compare the weighted score. 2019 Honda CR-V LX AWD trim has 265 points, and it’s highest score among other three cars. According to the safety features aspect, Honda CR-V has similar safety rating with Ford Escape and better than Hyundai Santa Fe and Toyota RAV4.

With the True Cost to Own aspect, Honda CR-V is also the winner between all four vehicles. The Honda CR-V has lowest average cost, lowest insurance cost in 5 years, lowest maintenance cost in 5 years compare to others. Honda CR-V’s fuel economy might be litter higher compare with Toyota RAV4 but still has better fuel economy than other two. Lastly, when comparing with the cash price and resale value. Honda CR-V is highest compare to Ford Escape in the smart buying zone, which Toyota and Hyundai are not in the smart buying zone. Comparing with all the aspects with these four cars, and I have picked the 2019 Honda CR-V as the best choice for buying company car.

I have used the Tableau dashboard to assist me conduct storytelling of the data I collected. I was looking for two things: Patterns and Relationships. (Yau, 2011) When I comparing the True cost to own data, and I have used the horizontal bar chart grouped three different types of aspect to compare the True Cost to Own. I also used three different colors to compare them, from light green, mid green, and dark green. Light green represent total insurance cost in 5 years, which lowest cost between all three types of expenses. Mid green represent total maintenance cost in 5 years, which is the second low cost between these types of expenses. Dark green color represent total fuel cost in 5 years, which is the most expensive between these three types of expenses. I also calculated the average of the True Cost to Own in different type of the cars. I have used the red line with pink shade below average to help the audience easily tell the different when comparing with the average.

When I compare the safety rating I used two types of graphics. First, I have used area type of bar chart to calculate the average of these ratings. I used the grey color shade to tell the data. I also used multiple line charts to compare the patterns of the safety rating of different part of the cars. That’s including the overall rating; overall rollover rating, overall frontal rating, overall side barrier rating, and overall side crash rating. I have used logo in the bar chart to separate them due to provide the better visual result and easily recognized by the audience.

I have used standard bar chart when I compare the combined weight score. I used light grey, mid grey, dark grey and dark green to separate these types of cars. I used the dark green and logo to stand out the winner. The final chart I have used is the circle chart, and it’s using the cash price of the cars and resale value after 5 years data. I calculated the average value of the cash price and median of the price point. I have colored with light green to represent the smart buying zone. The purpose of the smart buying zone is helping the audience to realize what’s the most reasonable price among these cars. In this chart, the cars with the better price are listed below the median value and above the resale values area. With all these comparisons, I have chosen the 2019 Honda CR-V as the best choice of buying company car.

**Reference:**

Yau, N. (2011). Visualize This: The FlowingData Guide to Design, Visualization, and Statistics. *Wiley Publishing Retrieved from* <https://www.wiley.com/en-us/Visualize+This%3A+The+FlowingData+Guide+to+Design%2C+Visualization%2C+and+Statistics-p-9780470944882>

**Cars resources:**

2019 Ford Escape AWD Safety Ratings from NHTSA

<https://www.nhtsa.gov/vehicle/2019/FORD/ESCAPE/SUV/AWD>

2019 HONDA CR-V AWD Safety Ratings from NHTSA

<https://www.nhtsa.gov/vehicle/2019/HONDA/CR-V/SUV/AWD>

2019 HYUNDAI SANTA FE XL AWD Safety Ratings from NHTSA

<https://www.nhtsa.gov/vehicle/2019/HYUNDAI/SANTA%252520FE%252520XL/SUV/AWD>

2019 TOYOTA RAV4 AWD Safety Ratings from NHTSA

<https://www.nhtsa.gov/vehicle/2019/TOYOTA/RAV4/SUV/AWD>

2019 Ford Escape SE AWD Cost to Own from Edmunds

<https://www.edmunds.com/ford/escape/2019/cost-to-own/#style=401768439>

2019 Honda CR-V Cost to Own from Edmunds

<https://www.edmunds.com/honda/cr-v/2019/cost-to-own/#style=401780791>

2019 Hyundai Santa Fe XL Cost to Own from Edmunds

<https://www.edmunds.com/hyundai/santa-fe-xl/2019/cost-to-own/#style=401767855>

2019 Toyota RAV4 Cost to Own from Edmunds

<https://www.edmunds.com/toyota/rav4/2019/cost-to-own/#style=401782485>