Term Project Milestone 4

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DS 500 T301: Introduction to Data Science

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August 12, 2022

Review on Motorcycle Vs Cars Safety

1) Is the theory or question clear and understood?

Yes, the question is clearly understood. It is regarding the comparison of the safety of motorcycles and the car. Which one to buy is it a Motorcycle or a Car?

At first, Kalyan had broader questions related to Motorcycles and Cars. He then narrowed it down to questions related to the Safety aspect of Motorcycles and Cars.

2) what are some strengths of the outlined plan?

Kalyan has clearly outlined everything about the usage of cars and motorcycles with google trends in a nutshell. I like the way he has taken into consideration of normal cars and also Hybrid cars when it comes to the usage of gasoline. He covered almost all of the aspects related to Motorcycles and cars.

The Questions he had at first were:

1. Should you buy a motorcycle instead of a car?
2. Are motorcycles better on gas than cars?
3. Does Motorcycles have better resale value than cars?
4. Are there any physical or mental health benefits of riding motorcycles/cars?
5. Which is cheaper to buy and maintain?

The question he explained in detail is "Are Motorcycles safer than cars?"

He delved deep into the topics with google trends:

1. Percentage of motorcycle riders who get into accidents
2. How much more likely are you to die on a motorcycle than on a car?
3. Do motorcycles have larger blind spots than cars?
4. Where do most motorcycle accidents happen?
5. What are the primary causes of motorcycle crashes?

3) What are some areas of opportunity to improve the analysis?

I really appreciate the way Kalyan has presented the concepts with many google trends. I want to add a few points to improve analysis regarding the safety of the individual when driving a motorcycle as a single mistake can cause a life-threatening situation.

More analysis can be done by taking weather into consideration.

1. How many individuals take safety measures while driving on a motorcycle in bad weather (Look at the weather and avoid driving on a motorcycle if possible)?
2. How can we reduce the accidents while driving the motorcycle (how many people stop driving and take shelter in case of bad weather)?

More analysis can be done on the Common Causes of motorcycle crashes:

3. Cars making left turns
4. Unsafe lane changes
5. Opening the doors of a parked vehicle in the path of an oncoming motorcycle.
6. Distracted driving
7. Defective equipment

4) Are there any assumptions that were made that you think should be investigated more?

There are not any assumptions or challenges/opportunities section written in the document. The following are the assumptions that can be investigated more:

1. Motorcyclists are at fault after a crash. Anyone who disobeyed the traffic laws is at fault rather than a motorcyclist.

2. Regarding helmets of motorcyclists, the assumption is that they block the ability to see or hear danger. This is not true because the helmet protects the eye from wind and debris.

3. The Racing Tires Are Safer Than Road Tires. This is not true because Racing tires are best on dry roads but when riding in the rain, since they have fewer grooves than road tires, they cannot channel water out of the way.

4. The individuals who ride Motorcycles Are Low-Class. Not true as people from all walks of life drive motorcycles.

5. 18-25-Year-Olds Are at Most Risk: This is not true as the NHTSA's latest findings state that the 40-55 years age bracket has the more fatality rates.

5) Are there any ethical implications that should be considered?

Here are some ethical implications that need to be considered.

1. self-driving cars should be programmed to choose crashes where the occupants will probabilistically suffer the least amount of harm: Imagine a self-driving car and it needs to crash either a motorcyclist with a helmet on the right or the motorcyclist without a helmet on the left. Self-driving cars need to be programmed to crash on motorcyclist with a helmet to reduce injury.

2. Unfair perceptions of all bikers being reckless or having devil-may-care attitudes on the roads

3. Responsibility needs to be shared between all the road users and system designers, with comprehensive involvement, like politicians, road managers, community planners, police, vehicle manufacturers, the health sector, rescue forces, transport companies, and everyone who uses roads

4. The people who have more expensive cars are considered to be rich and those who drive motorcycles are economically backward individuals.

5. There is a bias that only Men can drive Motorcycles. You Have To Be A Big Man To Ride A Motorcycle is a myth and it is a question of ethics. Only strength matters. Some motorcycles are built to fit everyone. The largest segment of motorcycle drivers is women! And while some of those women can be able to bench press as much as a man,

they’re of average strength. Strength is needed to maneuver and turn the bike and direct it. There is no need be some grizzled, bearded tough guy to ride a motorcycle.

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