Self Driving Cars As A Way To Tackle Distracted Driving

Face it, the future is here, and most people are aware of all the changes. Every day people realize that something will be or has been innovated. One of the biggest and most visible changes are self-driving cars, which are becoming even more technologically advanced, but can they really be beneficial to the safety of drivers? Often, people are simply trying to get the latest innovations; therefore, artificial intelligence (AI) computers have been put into new cars without considering the effects it will have. Most vehicle manufacturers have now employed new innovations into the automobile market that allow for safer and more efficient cars for public use. These add-ons include automatic parking, hands-free calling, texting lane departure, also hands-free tailgating sensors, which all have the potential to result in some of the safest driving conditions yet.

The reality is that in the near future humans will have cars driving themselves. As a result, society will have to learn to accept these new innovations that allow for driving to become safer. The government should allow the driverless cars to be on the streets, due to them eliminating the distracted drivers on the road and providing a sufficient amount of benefits. These drivers are distracted mostly by cellphones use, but also by passengers in the back of the car that alter their ability to focus. Distracted driving is hazardous, resulting in tragedies ranging from T-bones to the loss of lives. Statements from Google have said that over 5,338,000 car accidents have occurred every year in the U.S. so, therefore this amount average tends to lead to about 15,913 accidents every single day. (Elon Musk) This represents the number of collisions between cars or vehicles with fixed objects in 2018. Due to this number, there was a substantial amount of deaths due to vehicle wrecks 36,750 to be exact. With the help of self-driving cars, that number can be lowered greatly.

In the Ted Talk “If Cars Could Talk, accidents might be avoidable” by Jennifer Healey, the author expresses her opinion about talking cars, reducing the number of wrecks. She explains this by showing that if the cars could talk to each other about driving hazards, and looking out for one another, there would be fewer wrecks and vehicle caused deaths. Her theory supports the idea of talking cars, which people could believe to be true. If cars could talk, the roads would be a lot safer for drivers and save many innocent lives.

Healey uses Pathos in her Ted Talk when explaining how she had her first wreck as a teenager. She explains that she saw the brake lights, hit the brakes, but couldn’t get stopped fast enough due to her delayed reaction (00:47). She makes sure to include pathos so her audience of listeners can relate. Most drivers have their first wreck as teens. While some are just fender-benders, many are a lot more dangerous. Like Healey’s wreck, for example, the airbags deployed and the vehicle was totaled. This example strengthens her argument because she has had experience with wrecks and firmly believes that if the vehicles could have communicated, the wreck may have been avoided. She also explains that distracted driving could be due to phone usage. With the popularity of cell phones, everybody's lives are wrapped up in the devices, and they never seem to put them down. This proves her point, because even if people were on their phones, and cars communicated, the number of wrecks may decrease. Therefore, by using information about car wrecks as part of her support for her discussion.

Healey also uses Logos when she talks about how cars can see a lot more than the human eye. She explains that even if a vehicle comes out of nowhere, they have still been on the road for some time.

Almost all modern day cars have GPS built-in, which means that with the right advances in technology, a car will see when another vehicle was coming up from behind them at a much higher speed and would have more time to react to the situation. This feature would also help to cut down on wrecks (3:30-4:49). This defends her argument because if cars responded to one another, they would be able to avoid a vehicle entering the road unseen. She also explains that when a driver is trying to check the blind spots, they are forced to take their eyes off the road, which can be distracting. Self-driving vehicles are equipped with lidar meaning (Light Detection and Remote Sensing) is used to measure ranges based on light. These are found in the lane departure and tailgating sensors. This is normally done either with the help of radars and cameras, but with laser vision, it’s hard to match. Radars are reliable but don't offer the resolution needed to pick out things like bodies or animals. Cameras give the details but require more machine-learning-powered software that can change 2-D images into 3-D. With these technological advances distracted driving can quickly become a problem of the past.

Since Autopilot was first added to each Tesla vehicle in September 2014, Elon Musk’s company has continued to improve the already impressive autonomous driving system. Autopilot’s software and hardware have been incrementally advanced. It has learned from the human driver behavior leading to the creation and improvement of its Auto Lane Change, Autopark, Autosteer, Summon, and Traffic-Aware Cruise Control features. The ultimate goal? Level 5 autonomy, which is the ability to navigate the roads with zero interaction from a human driver.

More than one million people die in traffic accidents every single year due to human error (Elon Musk). In March, Morgan Stanley’s “analyst stated that Tesla’s Model 3 and its Autopilot system might be an order of magnitude safer than every other vehicle on the road”. However, many people remain scared and unconvinced when the topic of self-driving cars.

“Some generally fear new technology and autonomous cars, even when data stating otherwise is staring them in the face.”According to Musk, during his talks with reporters, “...he says that human-driven cars are the obvious threat to safe transportation, and every time a critical voice speaks out against the technology, they impede the inevitably of safer roads that will follow the widespread adoption of autonomous systems” (Friedman). In 2016, he didn’t mince words when he told the press “that vocal self-driving vehicle skeptics and members of the media who unfairly focus on the flaws of such systems are essentially killing people” (Friedman).

Elon Musk believes that humanity’s future includes self-driving cars. How some might feel about those autonomous systems won’t stop that future from arriving. A continued preference for a far more dangerous system than humans already know, such as normal, everyday vehicles, results in accidents, injuries, and deaths- meaning pain, suffering, lost money, time, and lives. Maybe it’s time to listen to Elon Musk and let our best drivers take the wheel for us. In May of 2017, Musk stated, “I really believe that one should lead from the front lines and that’s why I’m here….. Self-driving cars surely will make a huge contribution to society. We’ll be able to redesign the urban environment so that parks will replace parking lots” (Elon Musk).

This tells the audience that right now, it may be hard to adapt to self-driving cars, but in the

future, they will have the potential to be the new standard of driving, due to the safer capacity. The unknowns and what-ifs are the things that some would find scary and unable to trust.What would happen if someone took control over the self-driving vehicle and made it crash?Another question might be if the self-driving car is driving itself, does that mean the owner doesn't need insurance? What if the vehicle crashed into another who is liable or would it go against their driving record, what if the car got a ticket? Those what-ifs should be able to vanish from the minds of people. How come those same thoughts don't come to mind when the new iPhone gets released, or when a new ride gets opened at an amusement park?

The self-driving cars will not be allowed to drive on the roads until they are approved to be road worthy. The requirements for a self-driving vehicle to be able to do so is that it must be programmed, pass every test, and have a better driving capability than humans. This means that there is very little room for error with this type of product. The other problem is how much will they cost and actually benefit the owner. A solution to this problem is that they will be pricey, but not much more expensive than a new vehicle.

The self-driving car would save so much time and, in the long run, would save money for the consumers. If at least 34% of the world owned this car, humans might be able to predict that there will be a reduction of wrecks and traffic. The only real downside is that not everyone will be able to afford one. Also, for that reason, there will still be some wrecks and traffic, but the number would be significantly reduced.

Again, Healey uses Logos when explaining how almost everybody has a GPS. If only two cars were to share their location, speed, and the driving conditions of the others around them, then it could drastically help everyone on the road. This proves the author's point because there are many other ways to curb distracted driving and improve safety on the road. All it would take is everyone inputting their own data. She also uses Logos when she talks about robotically testing the sensors that are in cars. She explains the methods used and how the robots reacted to one another. The study showed that with just this small amount of research and data for drivers, that driving standards were much higher. This proves the main idea because it shows that there are much safer ways to improve driving (06:48).

The self-driving car was designed to give the driver a buffer, due to the fact that people tend to get easily distracted. Inventors, like Musk, have just laid out the groundwork for much more to come and be carried out by future generations. Ideas to save the lives of pedestrians, drivers, and passengers will always be thought of to help make the positive aspects of these cars into the buyer's minds. In the long run, humans must have an open mind when products like these do get released, for they will change the world for the best.

In conclusion, self-driving cars would make the roads safer as well as more time-efficient because they drive better than humans resulting in fewer accidents. This would, therefore, result in fewer wrecks due to distracted driving. This is because even if the driver was distracted, the vehicle could improvise and keep the people on the roads safe.