In the past few years, self-driving cars have gotten a lot of attention and research. They not only raise significant ethical dilemmas but also hope to improve transportation. This technology has the potential to help millions who are unable to drive, as well as save people from injury/death.

Transitioning self-driving cars into society will probably take a long time, and risks from this period will arise due to the coexistence between human-driven cars and self-driving cars. However, I believe as we get past the hurdles of perfecting the technology, finding solutions for problems in the transition period, and addressing ethical dilemmas as a society, self-driving cars could be a positive benefit to be brought into society. I do think it is better to proceed with caution as AV technology could backfire.

Because they must make split-second decisions that could mean the difference between life and death, self-driving cars bring challenging ethical dilemmas. The trolley problem, where the car must decide between two harmful outcomes, is a major cause of worry. For example, should the vehicle hit somebody walking to protect those inside it or sacrifice its passengers to protect the pedestrian?

The possibility for algorithmic biases in self-driving cars is also another problem. Machine learning algorithms are used in self-driving cars to make conclusions after analyzing a bunch of data. The training data may contain biases that favor demographic groups, which could potentially lead to the self-driving car acting with bias whether intentionally or accidentally.

Also, there is another issue which is liability. Who should be held accountable when accidents happen—the AV car manufacturer, the software developer, or the car owner? Legal and ethical issues could arise because of how difficult it might be to determine who is responsible in certain situations.

Increasing road safety is one of the main reasons self-driving cars are being developed. However, there is still a big obstacle to getting the public to accept self-driving cars widely. When faced with the idea of algorithmic mistakes or hacking, people may be anxious to trust a machine with their life.

The issue of social acceptance is another one. How do self-driving and human-driven vehicles and pedestrians interact? Self-driving cars face difficulties getting around difficult social interactions and correctly reading gestures and intentions because human behaviour is unpredictable.

The work environment will be significantly affected by the introduction of self-driving cars. While they may replace some jobs, like taxi and truck drivers, they could also open new career paths, including those in autonomous vehicle maintenance and management. The economic effects of this technology must be considered, and the transition must be handled carefully to prevent negative impact.

While self-driving cars have many benefits, they also present a number of ethical dilemmas. Decision-making, algorithmic biases, liability concerns, public trust issues and socioeconomic consequences are a few of these. As this technology develops, it is crucial to have thorough discussions and create regulatory frameworks that put safety, justice, and the benefit of society first. As this technology is being developed, society itself is a huge part in addressing ethical dilemmas for self-driving cars to be adopted.