

CPR E 394 Ethics Essay

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Ethical issues are prevalent in all parts of modern society, and engineering is certainly no exception. Having a code of ethics and being able to apply it to ethical problems is a key skill for any engineer entering the workforce. In CPR E 394, codes of ethics, such as the IEEE Code of Ethics and Virtue Ethics were discussed and applied to various historical ethical issues to help prepare for potential issues encountered in the workplace.

The purpose of a code of ethics is to provide a set of principles for figuring out an acceptable course of action when presented with an ethical dilemma. For example, the IEEE Code of Ethics presents several guidelines to avoid unethical actions. One of the points of the Code of Ethics is to avoid real or perceived conflicts of interest. This is something that can and does occur often in the workplace, such as when a friend or family member may want preferential treatment when it comes to business relations or hiring. By having a set of guidelines, it can become clearer what responses are acceptable in a situation.

When I encounter an ethical situation, I try and consider the different sides involved in the situation and make the choice that results in the best outcome with the fewest negative consequences. Some factors that I would consider (in rough order of importance) are potential for injury/death, damage to relationships/reputation, and financial loss/gain. I then try and weigh the pros and cons of different options. For example, if I had the opportunity to make large amounts of money from unethical behavior, such as selling stolen intellectual property, at the cost of my integrity and with risk of damage to my reputation, I would choose not to engage in that behavior, since the risks far outweigh the rewards. In another instance, if I notice something

at work that if reported, would result in financial loss but could prevent injuries or deaths, I would speak up about the issue, since even though causing a financial loss could be considered unethical, in my mind knowingly causing injury or death is much worse. I understand that as an engineer, my negligence or failure to speak up about concerns can cause a huge number of problems from injury/death to severe environmental damage.

Codes of ethics were applied to several issues during a class discussion. These issues included a situation involving personally identifiable information at a company, the Ford Pinto incident involving fires from a poorly designed gas tank, the Volkswagen emissions scandal, and a murder case in which law enforcement wanted to use an Amazon Echo as evidence in court. Different members of the class wrote responses to each of these issues, including applying a code of ethics to the problem.

The ethical issue that I posted about in the class discussion was the Volkswagen emissions scandal. During the scandal, Volkswagen used a device that cause the car to enter a low-emissions mode during emissions testing to allow them to produce cars that weren't compliant with emissions, saving money and time on development. Most of the other class members that responded seemed to agree that Volkswagen prioritized profits over following regulations and protecting people and the environment by reducing harmful emissions. Some people that responded pointed out that it is less than clear who's job it was to speak up about what was happening, which is understandable, but I would argue that anyone who was knowledgeable about the problem was responsible, but especially the engineers who were instructed to create the defeat device. I don't think it's important to argue about whose responsibility it is to report an ethical issue so much as empower everyone to speak up, regardless of their involvement. Imagine if someone had a medical emergency and people

argued about whose job it is to call 911 instead of someone just doing it. I think the same logic applies here.

The Virtue of Ethics is a list of six principles that can be used as a basis for tackling ethical problems. The six principles are integrity, honesty, fidelity, charity, responsibility, and self-discipline. In the case of the Volkswagen emissions scandal, the three principles I think are most relevant are integrity, honesty, and responsibility. By using the defeat device to defeat emissions testing, Volkswagen showed they were willing to compromise ethical principles to save money and time, which shows a lack of integrity. They also broke trust by using the device, since both the public and regulators trusted that they were following laws when they were cheating to get around them. Finally, Volkswagen showed a lack of responsibility when it came to the issue, since no one at the company made any attempt to correct the issue until after external sources had already found out about it. This behavior is even more unacceptable, since it wasn't just a one-time action to try and get around issues on a single car, but a repeated behavior that irresponsibly endangered the environment and people in urban areas with increased pollution.

Two of the other ethical virtues, charity and self-discipline, I feel are not as relevant to this case. The issue in question wasn't about Volkswagen failing to help others, but failing to harm them, so I think it's less about charity and more about obligation. Self-discipline also doesn't seem applicable since this wasn't the result of excessive behavior or lack of restraint. The final ethical virtue, fidelity, I think is potentially applicable, since Volkswagen was an established company that had been around for decades and showed a lack of loyalty to their customers and the public by engaging in emissions cheating behavior. I don't think that's the biggest reason why what Volkswagen did is unethical, but it is a reason, nonetheless.

The ethical frameworks discussed in class along with the example scenarios will provide a foundation for dealing with ethical issues in the workplace. This will help enable me to make ethical choices and help prevent future incidents like those discussed in class from occurring. It's not always possible to make a perfect decision in an ethical dilemma, but the frameworks in CPR E 394 provide a baseline to make better ones.