Ben Fristad

CSCD 202

6 January 2020

Week 1

Individual Writing Project: Computer and Network Security

The invention of technology has greatly impacted the world both in positive and negative ways. For example, people now have access to more information than ever and have easy access to all their personal information. This makes online transactions easy to access and improves the quality of life. However, there were some unintended consequences; such as unethical people breaching other’s security to gain personal information. In the article, *Security: Solutions for Enabling and Assuring Business,* they list some of the biggest security breaches. A relatable example listed in the article was when “two third-party Facebook apps datasets were insecure, and 540 million records were exposed. This example relates to the book *Ethics for the Information Age* because it shows how technology has evolved to improve life but also had unintended consequences.

The second article, *10 Deadliest Computer Viruses of All Time,* describes some of the viruses that have been catastrophic to the world of the internet. For example, the I Love You virus, which was one of the largest viruses of all time. It caused around $10 billion worth of damage to computers and infected roughly 10% of the world’s computers. Another example of a catastrophic computer virus was the Conficker virus, which was a worm that infected computers by finding flaws in the computer’s OS to create a botnet. This virus caused roughly $9 billion in damage. This is a very unethical practice because the creators of these viruses were just intending to cause chaos. However, the creator of the I Love You virus sent a message saying “Andy; I’m just doing my job, nothing personal, sorry,”. People believe that the creator of this virus was paid because of this message. This is an example of a person doing something unethical for a personal gain.

These issues can also be viewed from different perspectives, such as, the Utilitarian, Social Contract, Kantian, and Virtue approaches. First, the Utilitarian approach is the idea that the right thing to will always be the option that benefits the majority. When applying this idea to the computer and network security. It would be beneficial to the majority of people who did not create viruses, which is why people are creating software to fight against the problem. Next is the Social Contract approach, which is the idea that it is a rule for people to do the right thing. From this perspective introducing viruses is also very unethical because the people that hack and introduce viruses are doing for either personal gain or just to cause chaos; both of which completely go against the social contract. Next, Kantianism, which is the idea that the consequences of actions do not matter as long as the duty is fulfilled. From this perspective, hacking and introducing viruses can be viewed as ethical depending on the context of the situation. For example, if one believes that the government is impeding their natural rights, they may view it as an ethical decision to introduce viruses into the government’s network; however, this is an extreme case. Lastly, the virtue approach, which is the idea of having high moral standards. From this standpoint, introducing viruses and hacking into networks is unethical because it is morally wrong to steal or damage one’s property. When applying these ideas to the concept of hacking and viruses, it is typically an unethical practice because the hackers and creators of viruses typically intend to either cause chaos or make a profit. However, there are some specific instances where hacking and introducing viruses can be viewed as an ethical practice; such as the example given above.

From a less philosophical approach, viruses and security breaches are very rarely for a positive cause. Security breaches are typically for personal gain; for example, selling peoples’ data for money. This task is generally accomplished by hackers. There are multiple types of hackers: black-hat, grey-hat, and white-hat. However, only black-hat and grey-hat cause damage. A black-hat hacker is someone who breaks into system to destroy systems or for illegal gain, and a grey-hat hacker is a hacker who uses their skills to break into systems for other people and receive money as a reward. Both types if hackers are involved in data breaches. Creators of viruses act in a similar way. They choose to ignore their ethical senses and participate in activities where they either cause chaos or pursue self-interests. They are rarely used to benefit the greater population. Typically, viruses just cause a lot of damage. For example, viruses like worms and logic bombs. These are used to cause damage; nobody receives any sort of gain. However, viruses like adware and spyware are used to track the user and target them with unsponsored ads. This is an immoral practice because people in control of the virus can illegally monitor what the user is doing without them knowing. Additionally, they can also spam the user with ads even if they did not pay to have them there.

Overall, data breaches and viruses are a highly immoral practice that cannot be viewed as ethical from any philosophical perspective. They are either used to pursue self-interests or cause damage. The data breaches at Facebook get access to 540 million records, which is an extensive amount of information to be compromised. The Conficker virus (worm) also caused significant damage by finding holes in networks and slowing them down. There are many other data breaches and viruses and they rarely have a positive outcome. Looking at the situation through many ethical lenses, including Utilitarian, Social Contract, Kantian and Virtue approaches. None of which could be viewed as ethical. Viruses and data breaches do not benefit the greater good.

Works Cited

Henriquez, Maria. “Top 12 Data Breaches of 2019”

https://www.securitymagazine.com/articles/91366-the-top-12-data-breaches-of-2019

Jamaluddin, Azwan. “10 Deadliest Computer Viruses of All Time

https://www.hongkiat.com/blog/famous-malicious-computer-viruses/