

The Unsustainability of Modern Technology

We currently live in the age of technology where technological devices are not only extremely valuable but are considered a necessity by some, it is estimated that more than 5 billion people have mobile devices, and over half of these connections are smartphones. With the surges in technology we begin to wonder if it is sustainable or unsustainable. Analyzing the sustainability of technology shows us that it might not be as sustainable as we think. This paper will argue the physical and environmental negative effects of technology, as well as the security threat that technology puts us at risk for; in order to prove technological devices as unsustainable.

To better understand the unsustainability of technology, it helps to discuss how much damage technology causes on our body; specifically our brain, eyes, and ears. Regarding our brain, The American Cancer Society (ACS) states that,

Scientists have reported adverse health effects of using mobile phones including changes in brain activity, reaction times, and sleep patterns. More studies are underway to try to confirm these findings. When mobile phones are used very close to some medical devices (including pacemakers, implantable defibrillators, and certain hearing aids) there is the possibility of causing interference with their operation (Naeem, 2014).

Despite the health effects mobile phones have on the brain, many users don't seem to care.

Additionally, an article in Optimax Eye Surgery, states that:

As the 2010s have been dubbed “the decade of the smartphone”, it is no surprise that extensive research has been conducted in this area. One finding which seems to be mentioned everywhere is “blue light”. This is the light which is emitted from our phones, tablets and laptops and, sadly, it has been found to have negative effects on our eye health...This means that any damage done to them is permanent (Green, 2019).

This means that any damage you get from the blue lights to your eye can be permanently. The last physical effect from personal listening devices can be noted through the article from UAMS health states that “60 minutes per day could result in lasting damage such as high frequency hearing loss”. If people continue to expose themselves, short term damage could become permanent (UMAS Heath, 2008). One can now argue that the physical effects of technology on the human body make it unsustainable.

Thousands of manufactures create smartphones every second of every day, without considering the environmental effects it can have. Researchers at Plymouth University have found that to make one phone, “10-15 kg of ore needs to be mined, including 7kg of high-grade gold ore, 1kg of typical copper ore, 750g of typical tungsten ore and 200g of typical nickel ore” (Antonia, 2019). Which means that in order “to supply enough raw materials for the amount of phones produced yearly, tech corporations are mining tonnes of ores. If we put things in perspective, production of 1.4 billion phones a year requires 21 million tonnes of ores to be mined which equates to 1,532 Big Bens” (Antonia, 2019). This shows how much material is used to create only one phone...can you realise how much materials are used for the million of phones that people use. It can be argued all of the materials used to create one phone emit a ton of hazardous substances and gas, which end up either in the air or in the water. Consequently, birds are poisoned, which can then spread the disease to other animals when they fly, and to fish that can spread substances on animals that

eat them, for example to other breeds of fish or bears. Obviously, the negative nature of this environmental destruction is not sustainable for our planet's future.

Finally it is important to discuss the increasing amount of 'Hackers' that threaten our security. 'Hackers' are people or organisations who deceive individuals and steal their money or get into different companies' bank accounts and take credit card codes. Unfortunately, Hackers are everywhere and they destroyed peoples lives by stalking them or stealing from them. Hackers can only do their job effectively with the help of technological devices such as computers, phones and iPads. As a result, cybercrime initiated from Hackers is more profitable than the global illegal drug trade. The profit from the illegal drug industry amounts to around \$400 billion annually.

For comparison, cybercriminals have earned a total of around \$600 billion in 2018. I found some facts about hacking from hosting tribunal and the results I read were horrible, one of the facts were that it is a hacking attack every 39 seconds and Russian hackers can infiltrate a computer network in 18 minutes. Russian hackers are not wasting any time when they put their mind to it. North Korean hackers need just under two and a half hours. Chinese ones take longer – about 4 hours. (Hosting Tribunal, 2020)

As a result someone is being hacked every 39 seconds and the russian hackers are the fastest and the most dangerous hackers in the world. They can hack a site in only 18 minutes , meanwhile other countries such as North korea and China , may take longer.

Marriott International – 500 million users' data stolen. In 2018 Marriott International discovered attackers, who had remained in the system since 2014. The hackers stole the credit card numbers and expiration dates of more than 100 million customers. The other 400 million lost "only" some part of their private info – names, passport numbers. (Hosting Tribunal, 2020)

A company called Marriott International with 500 million users , got hacked in 2014 but the company noticed it in 2018. All the data was stolen ,including credit card numbers and expiration dates from 100 million customers, and some private information such as passport numbers and names were exposed for 400 million people.

In conclusion, modern technology is unsustainable and causes a lot of damage to our physical health including our brains, eyes, and ears, the environment, and creates a world-wide security threat for everyone. Many people, including scientists, doctors and politicians warn us about the little box we hold in our hand everyday, but now we all know how much damage it actually causes. Knowing this damage, it can be ascertained that as a whole, technology is unsustainable. In order for the general public to continue to benefit from technology in a more sustainable way, we need to limit our exposure to blue light by buying protective eyewear, stop purchasing new phones just because the new version comes out and use our current phones for as long as possible, and have better security passwords to protect yourself from cybercrime.

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