Sakshi Baldawa

Professor Haim Levkowitz

Mobile App Programming II

13 April 2022

The Cost of Living Online

Modern life requires so much of us being present in every moment, but most especially in the online world. From browsing on our phone for entertainment to working on our laptops, we are constantly surrounded by technology and the internet. As great and exciting as browsing the internet can be, we often do not think about the costs of living a virtual life. Browsing online contributes to three percent of global emissions. The digitization of basically every aspect of our life changes our mentality which contributes to a big shift in our lifestyle.

Using online devices may seem like a cheaper alternative and a more green lifestyle, but there is a great deal of bandwidth and electricity used. We may only think about our electronic usage or those near us, but with millions of people on this planet we must recognize how much bandwidth and electricity we all use as a whole. About sixty percent of internet usage is consumed by streaming. Various apps and websites such as TikTok, Netflix, Youtube, Instagram all contribute to this usage.

Not only is energy used when actually using the device but also during the manufacturing process. Ninety percent of the energy a smartphone uses in its lifetime is consumed during the making process which includes collecting materials, fabrication, recycling and other components. Digital technology contributes to three percent of all global emissions. There is no end to this technology takeover.

Devices are starting to become more energy efficient and use less bandwidth. Wind and solar energy are also helping lower the costs of energy as opposed to petroleum based fuels such as gas. Obviously the bigger the device, the more energy it consumes. A television uses ninety times more power than a smartphone. Consumers can use energy as much as they want but even providers tend to cap bandwidth. Customers have to pay for extra internet used so the price of streaming can cost a lot more which results in providers making profit.

Now that we have discussed how the cost of streaming can affect us day to day, here are some ways to reduce our digital footprint. One way is to turn off autoplay on YouTube or other streaming services such as Netflix or Hulu. Oftentimes, we leave our television on just for background noise but this can spike up our energy usage. Another way is to view videos in standard definition rather than HD, this can save eighty six percent of the energy we use. Also when we FaceTime or use Zoom, turning off the camera can save up to ninety six percent of our carbon footprint.

It is vital that we start to care more about this issue. We often overlook the digital footprint we leave behind. We focus more on the tangible resources that we consume, which are still an important factor in pollution but this focus is a different view we as humans should care about. Especially as digitalization of our life grows in more ways than one, it is essential we take a step back and notice how much of our lifestyle is online. For example, as I am typing this paper on my laptop. I am actively using energy and bandwidth.

We should focus on bandwidth and energy consumption and how we can reduce our digital footprint. It might even help us in other factors of our life, like instead of a Zoom meeting we could meet in person and make in person connections. Though there are bigger problems like

climate change and pollution, everything plays hand in hand. The cost of living online grows larger every day and it is vital we start to focus on that.

Sources:

https://cacm.acm.org/magazines/2021/12/256944-what-is-the-cost-of-living-online/fulltext

https://www.iea.org/commentaries/the-carbon-footprint-of-streaming-video-fact-checking-the-headlines