

Principles of Network Ethics

ehd3kh

April 23, 2020

1 Overview

- **Definition of Ethics** - “Behavior based on anticipated cooperative benefits.”
- **Network Neutrality** - Holding corporate entities (e.g. ISPs) accountable in the age of the internet
- **“The Surveillance Society”** - Virtues of Personal Privacy and Security
- **Internet of Things** - Massive personal data collection by modern household items
- **Digital Divide** - Class Disparity by digital age
- **Human Exploitation** - Consequences of internet pornography

2 What do Networks Enable?

- **Internet**
 - The whole world has continued to “shrink” following the advent of the internet. Never before has communication on earth been this easy and rapid.
 - Radio, Television, and Phones all have key limitations that the internet dispels. In fact, the functions of these technologies are now encapsulated by commonplace smart devices via Wi-Fi.
 - Perhaps the largest trade-off for the convenience of the internet is the inherent loss of privacy that follows. Simply making a Google account signs away certain rights to your own data.
- **Lack of Censorship**
 - A natural (if-not inevitable) byproduct of P2P/Client Server connection of the internet is free speech.

- Every world government imposes regulations on internet use to varying degrees (e.g. The US much less than China), but anyone who truly wants to bypass these regulations and *knows how* can.

- **Speed of Information**

- A rule of thumb: information travels at one foot/nanosecond. For reference, it would take data 0.018s to get from New York to London.
- This speed improves further with replication of information (Content Distribution Networks)

- **Anonymity**

- The ability to appear as anonymous on the internet is a two-edged sword for society.
- On one hand, oppressed groups are able to protest without outright fear of being identified and persecuted.
- On the other, identity theft is significantly easier, and bullying is exacerbated.
- Ultimately, both ends of the spectrum (Bad and Good) have been extended by the internet.

3 Societal Change due to Networks

- **News**

- News online is much bigger and more varied than news on TV.
- Pros and Cons: Support of democracy (e.g. Arab Spring) contrasted with detriment (e.g. Russian interference in the 2016 election.)

- **Shopping**

- With services like Amazon, shopping becomes shockingly convenient.
- A few clicks and keypresses can save you a trip to any store, with almost no additional cost.
- As a result, small businesses have suffered.

- **Social Media**

- Sites/Apps like Facebook, Instagram, and Snapchat afford society the ability to stay connected
- This has decreased our feeling of "need" to interact physically.
- The jury is still out on the holistic psychological effects of social media on developing minds.

- **Government**

- Government databases, .gov sites, online voting are all possible now.
- This poses new risks to national security around the globe.

- **Gaming**

- Video games can be played with people anywhere in the world, if the connection is good enough.
- Competitive E-Sport streams are now a massive market

- **Dating**

- Services like E-Harmony have now transmuted to apps like Tinder, which are used in wider age strata for people to find romantic partners.

4 Problems to Consider

- “The Internet was not designed to be secure, it was designed to be robust in the presence of failures. Security left as an afterthought”
- Most people *legislating* for the internet often do not themselves *understand* the internet.
- Moreover, many people already in power seek to gain and maintain *more* power through the use of the internet (Net Neutrality).
- Policy is inherently a step (or several steps) behind technology—this is exacerbated by the modern rapidity of technological growth.