

Networked Communications

Lecture 3-1

Computers & Society (CPSC 430)

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<https://www.cs.ubc.ca/~kevinlb/teaching/cs430>

Recap

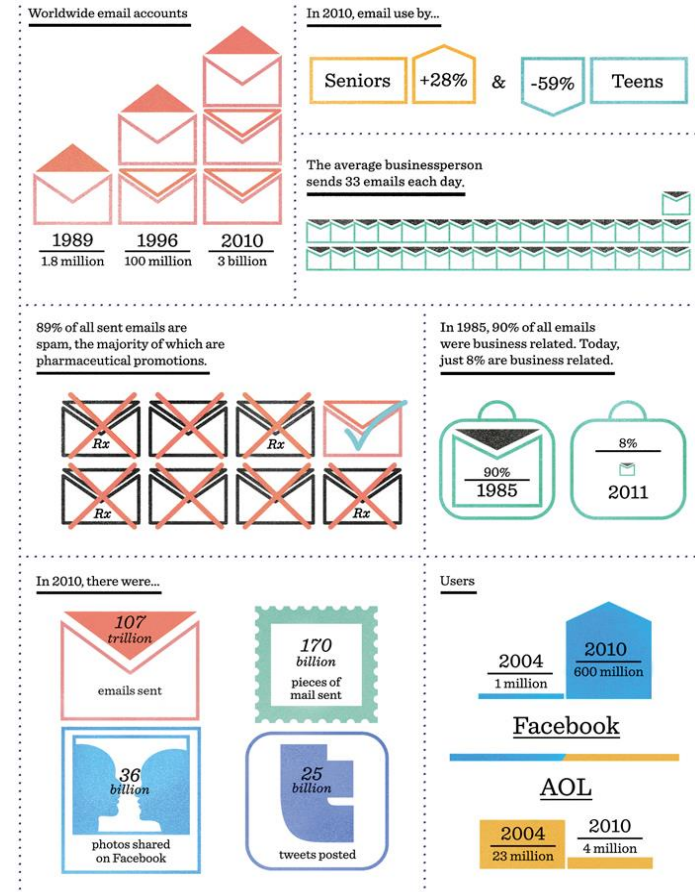
- Define:
 - Kantianism
 - Act Utilitarianism
 - Rule Utilitarianism
 - Social Contract Theory
 - Virtue Ethics
- What's the “right” theory to use?

So much for ethical theories. Let's transition to:

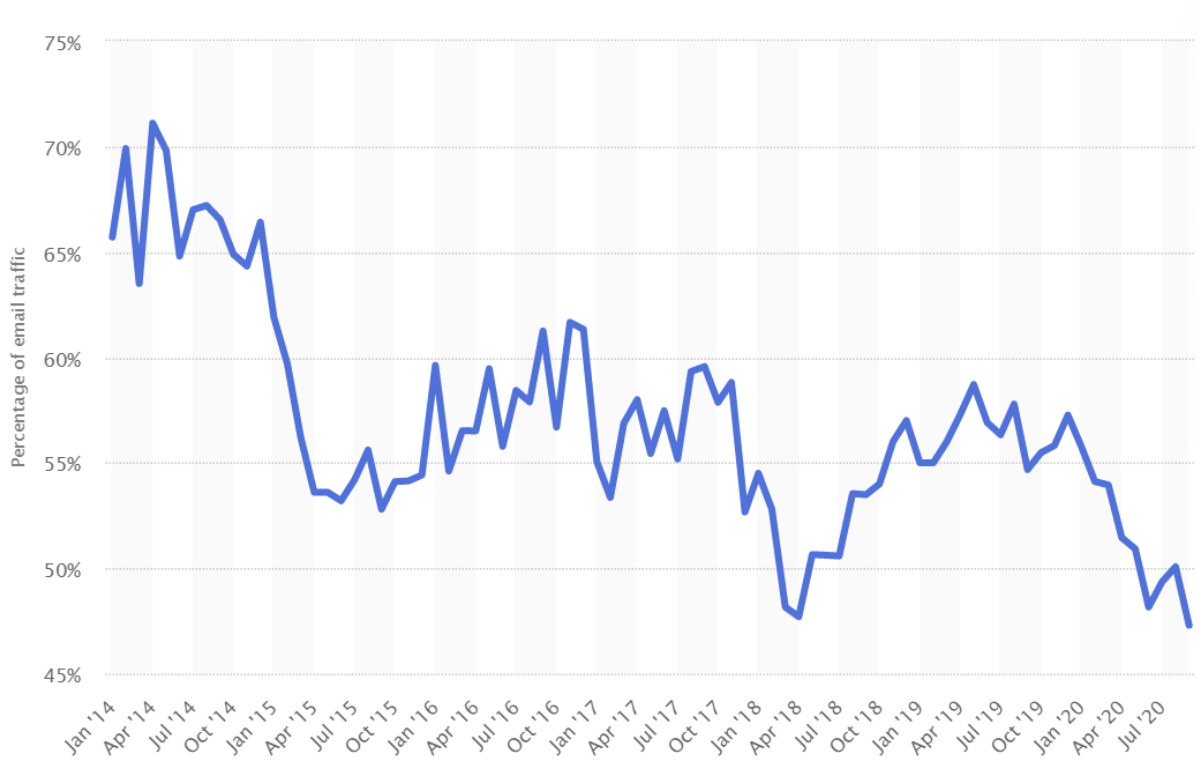
NETWORKED COMMUNICATIONS

The Spam Epidemic

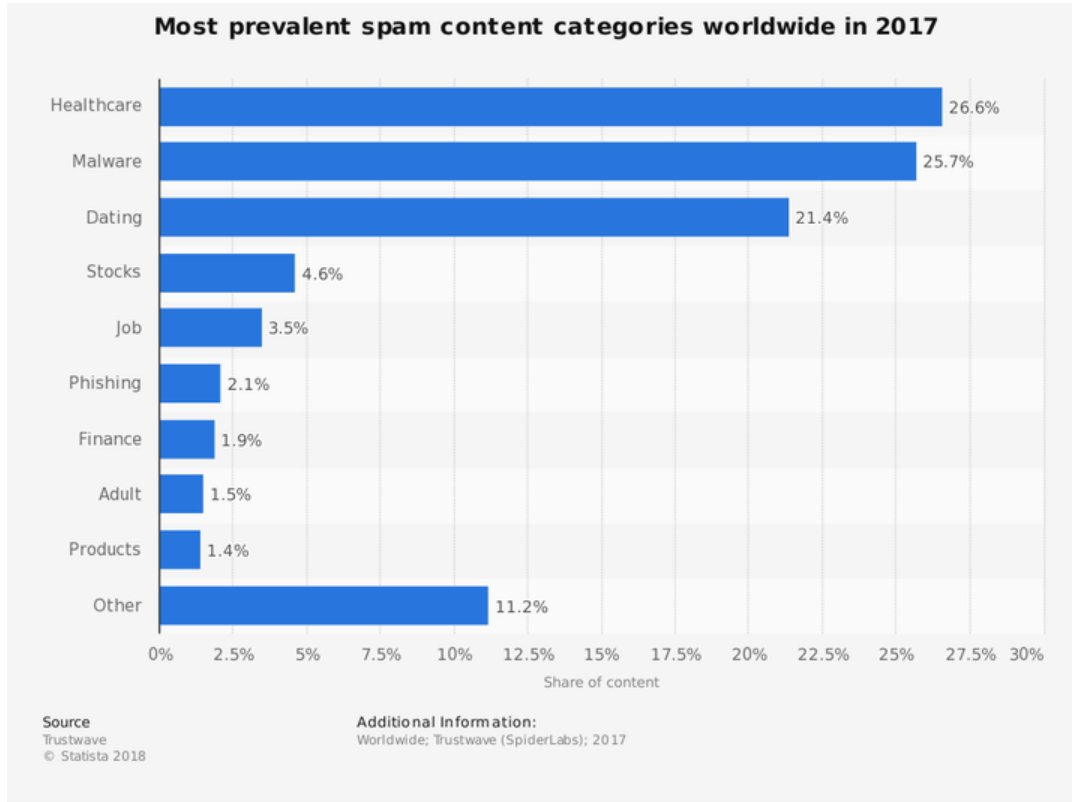
- Spam: Unsolicited, bulk email
- Spam is profitable
 - More than 100 times cheaper than “junk mail”
 - Profitable even if only 1 in 100,000 buys
- Amount of email that is spam has grown rapidly
 - 8% in 2001
 - 90% in 2009



...but things have gotten (somewhat) better



Main Spam Categories



Canadian Context

- **Canada's Anti-Spam Legislation (2014) prohibits companies from:**
 - sending commercial electronic messages without consent, including emails, social networking accounts and text messages;
 - alteration of transmission data in an electronic message, which results in the message being delivered to a different destination without express consent;
 - installing computer programs without express consent;
 - promoting products or services online using false or misleading representations;
 - collecting personal information by accessing a computer system or electronic device illegally;
 - collecting or using electronic addresses using computer programs without permission ('address harvesting').
- Source: http://fightspam.gc.ca/eic/site/030.nsf/eng/h_00039.html

Ethical Evaluations of Spamming

The book argues from each perspective that spamming is wrong. Let's see if we can make the arguments ourselves:

- Kantian evaluation
- Act utilitarian evaluation
- Rule utilitarian evaluation
- Social contract theory evaluation
- Virtue ethics evaluation

Which of these do you find most/least convincing?

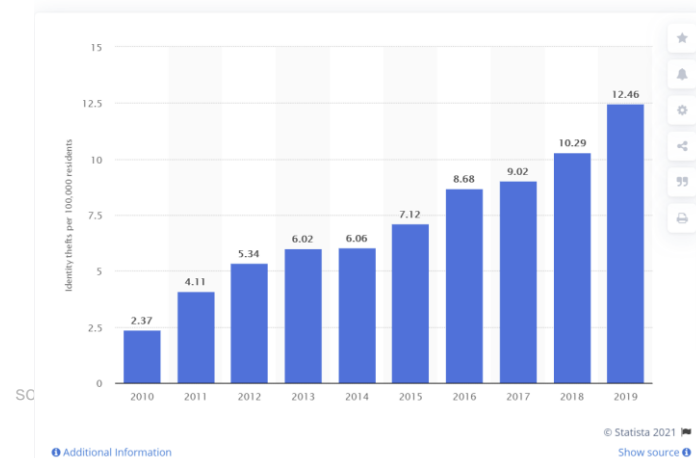
Need for Socio-Technical Solutions

- New technologies can cause social change
 - Calculators → feminization of bookkeeping
 - Telephones → blurred work/home boundaries
- Spam is an example of this phenomenon
 - Email messages practically free
 - Profits increase with number of messages sent
 - Strong motivation to send more messages
- For communications to be perceived as fair, they need to be two-way (allowing consequences for misuse)
 - Internet design allows unfair, one-way communications

Identity Theft

- Identity theft: when a person uses another person's electronic identity
- Phishing: use of email to attempt to deceive people into revealing personal information

Rate of identity thefts in Canada from 2010 to 2019
(per 100,000 residents)



Child Sex Abuse Imagery

- Recent explosion in online child sex abuse imagery
<https://www.nytimes.com/interactive/2019/09/28/us/child-sex-abuse.html>
 - 1998: 3,000 reports of child sex abuse imagery
 - 2009: over 100,000 reports
 - 2014: over 1,000,000 reports
 - 2018: over 18,400,000 reports
 - 1/3 of total ever reported; represents over 45,000,000 images
- It's important that we approach this issue with sensitivity
 - also important that we not ignore it; it's important
- *What factors contribute to this epidemic?*
- *Why have legal responses failed?*
- *What can be done?*