Lecture 3-1
Networked Communications

Recap

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

Midterm

- Rework one of Essay 3, 4, 5

- Double length (5000 chars)

- Will be marked only by TAs

- Due Thursday March 11/18, 4:45 PM PST
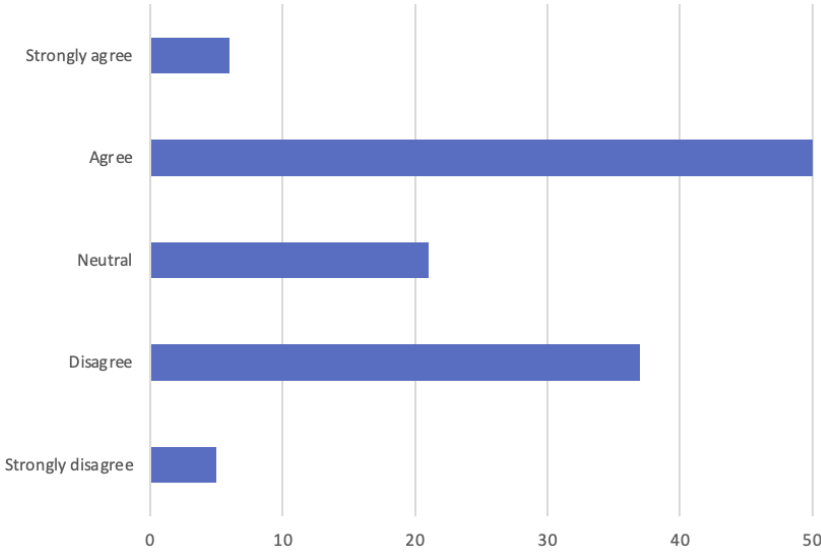
- (Yes, assignments still due every Tuesday)

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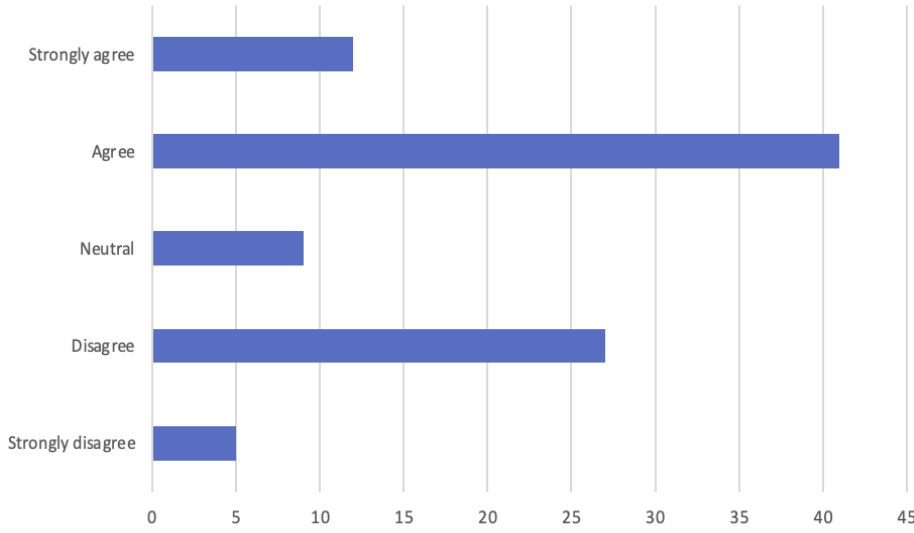
NETWORKED COMMUNICATIONS

Networked Communications

"Any social network above a certain size should be required to verify the identities of its members."

Before

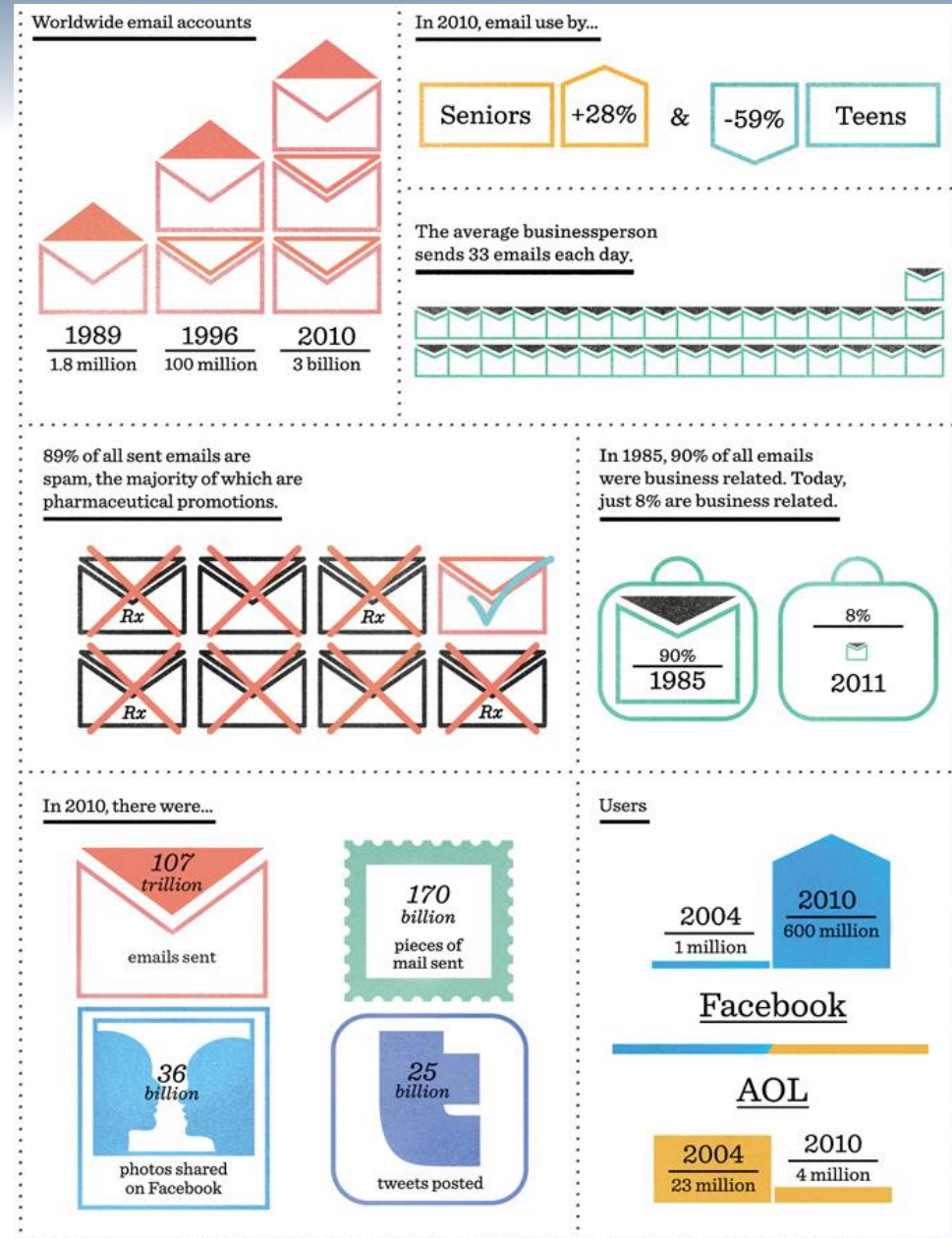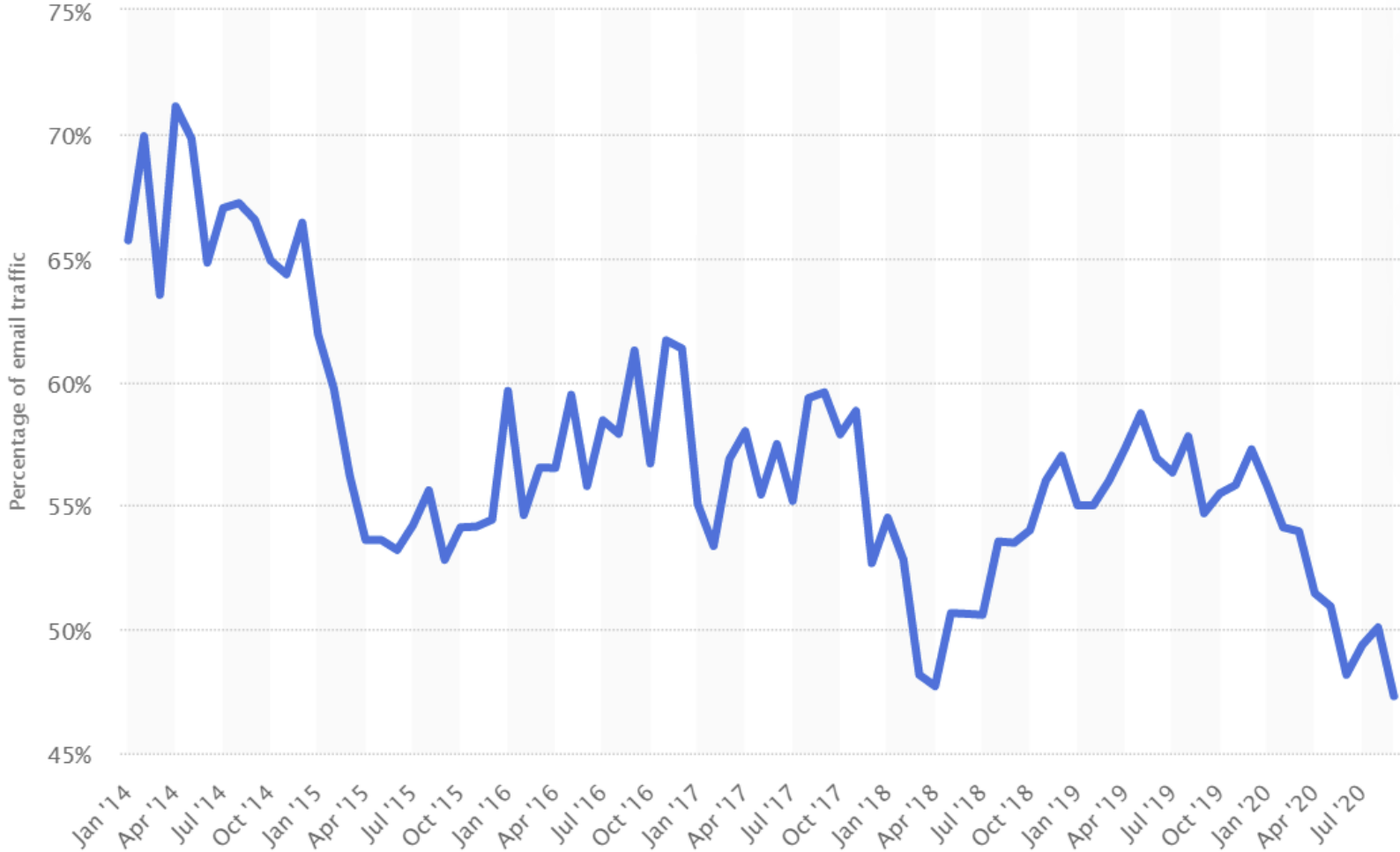|	
Strongly agree	
Agree	
Neutral	
Disagree	
Strongly disagree	

After

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 product
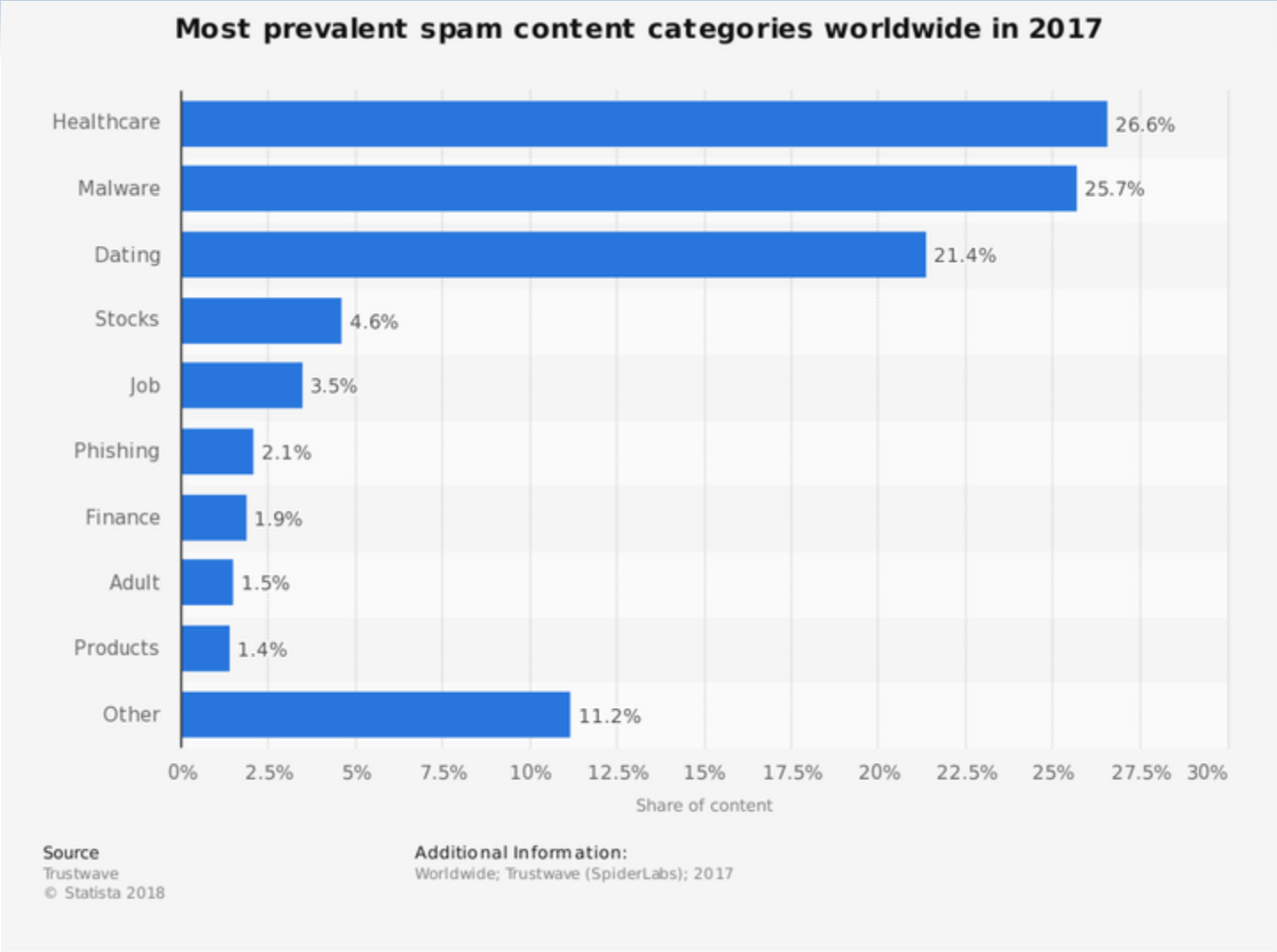- Amount of email that is spam has grown rapidly
  - 8% in 2001
  - 90% in 2009

Worldwide email accounts
1989 — 1.8 million
1996 — 100 million
2010 — 3 billion

In 2010, email use by...
Seniors +28% & -59% Teens

The average businessperson sends 33 emails each day.

89% of all sent emails are spam, the majority of which are pharmaceutical promotions.

In 1985, 90% of all emails were business related. Today, just 8% are business related.
90% 1985 — 8% 2011

In 2010, there were...
107 trillion emails sent
170 billion pieces of mail sent
36 billion photos shared on Facebook
25 billion tweets posted

Users
Facebook: 2004 — 1 million, 2010 — 600 million
AOL: 2004 — 23 million, 2010 — 4 million

...but things have gotten (somewhat) better

source: https://www.statista.com/statistics/420391/spam-email-traffic-share/
https://securelist.com/spam-and-phishing-in-q3-2020/99325/

Main Spam Categories

Most prevalent spam content categories worldwide in 2017

source: https://www.digitaltrends.com/computing/spam-making-comeback/

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 sometimes cause new social situations to emerge
  - 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