



# Lecture 3-1

# Networked Communications

Addison-Wesley  
is an imprint of

PEARSON

Based on slides © 2011 Pearson Education, Inc. Publishing as Pearson Addison-Wesley

# Participation Quiz

Which form of electronic communication is most central to your life?

- A. email
- B. facebook
- C. instant messaging
- D. text messaging
- E. other

# Recap

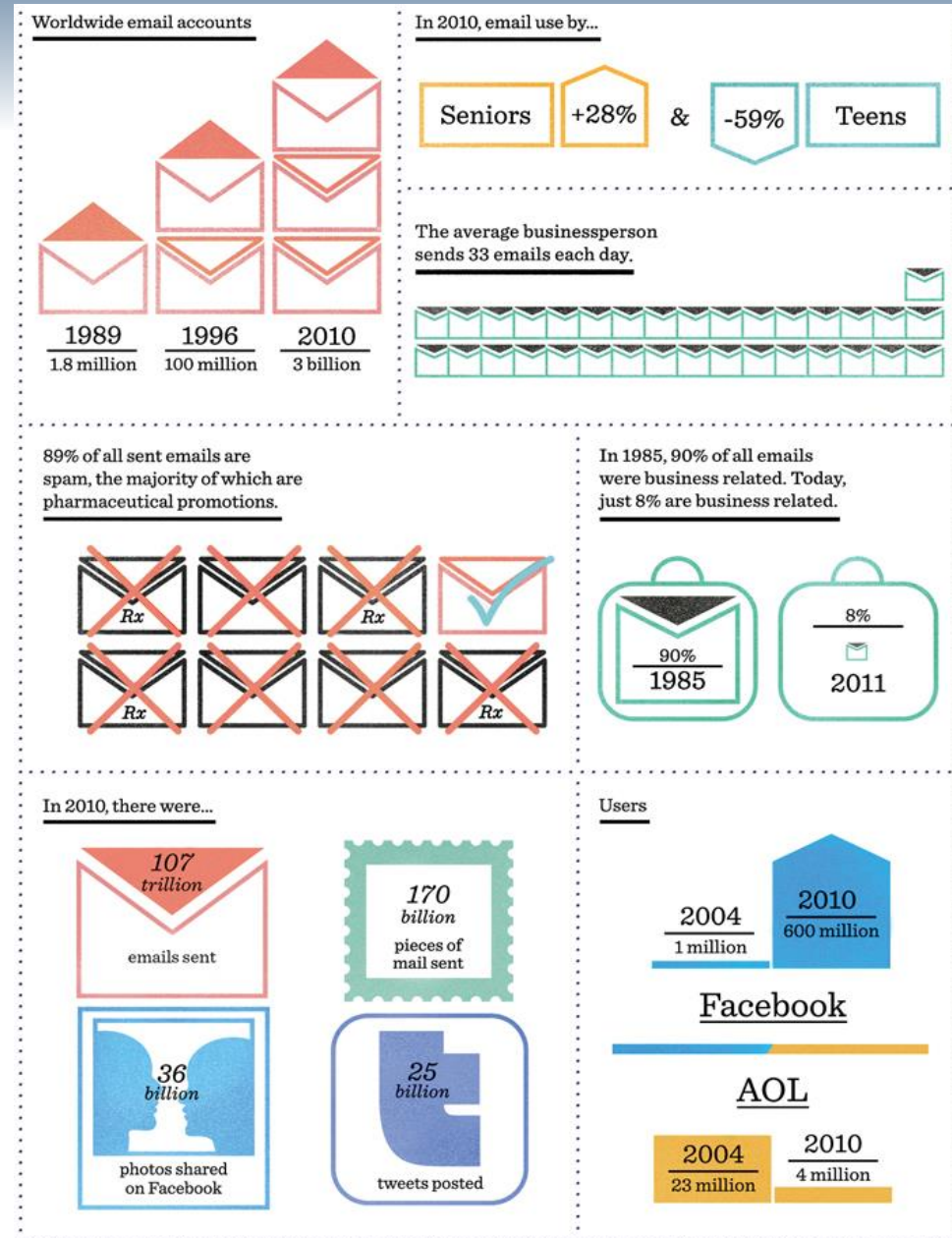
- Define:
  - Kantianism
  - Act Utilitarianism
  - Rule Utilitarianism
  - Social Contract Theory
  - Virtue Ethics
- What's the “right” theory to use?

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

# **NETWORKED COMMUNICATIONS**

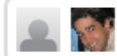
# The Spam Epidemic

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



...but things have gotten better

# The Dying Business Of Email Spam



4 comments, 3 called-out

+ [Comment Now](#) + [Follow Comments](#)

Spam email is on the wane. And no one on God's green Earth is going to miss it.

The share of spam in email traffic decreased steadily throughout 2012 to hit a five year low, an unprecedented decrease. The main reason behind the decrease in spam volume is the overall heightened level of anti-spam protection, says the Moscow based junk mail and cyber crime fighting Kaspersky Lab.



A report by Kaspersk Lab in Moscow says the number of spam attacks on email accounts around the world has fallen to five year lows thanks to new methods to block it by software security firms.

See: [Kaspersky Lab Security Bulletin On Spam Evolution 2012](#)

# 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



# Government Control of the Internet

- Myanmar, Cuba, North Korea: Internet virtually inaccessible
- Saudi Arabia: centralized control center
- People's Republic of China: “one of most sophisticated filtering systems in the world” as well as censorship
  - Current censorship of “occupy central” news on mainland
- Germany: Forbids access to neo-Nazi sites
- United States: limit access of minors to pornography
- *Can you think of other examples?*