CIS 381: Social & Ethical Issues of Computing

The Internet

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Spam

- Unsolicited, bulk email
- Internet design allows unfair, one-way communications
- Spam filters help address this
- Amount of spam declining, but becoming more targeted
- Girl Scout Cookies Example
Mobile Internet and Text Messaging

- "Africa not just a mobile-first continent -- it's mobile only", T. Shapshak, CNN, 2012
- Text messaging: supported on many phones
- Sub-Saharan Africa has 140 mobile money services in 39 countries, or over half of the 277 total services globally
- M-PESA in Kenya
  - Bypasses traditional banks, send money via text message
  - Processes over 1.7-billion transactions a year which accounts for more than 50% of Kenya’s GDP value (2018)
Assignment 3

- Link
- First chapter of "Against Intellectual Monopoly" by M. Boldrin and D. K. Levine
- Similar format as A1 and A2
- Due and discuss next Tuesday (Feb. 19)
Twitter

- Web-based social networking service
- Allows short messages (tweets) to be posted (with images and/or links) publicly
- Message length increased from 140 characters to 280
- Tweeting versus blogging?
- Following and Retweeting
- Businesses use Twitter
  - Marketing
  - Responding to customers
- Politics and Twitter
  - Current US President's favorite communication medium
  - Arab Spring
Twitter and Political Activism

• Instrument of coordination?
• Decisive role or catalyst?
• M. Gladwell, "Small Change"
  - Tweet-based activism is low risk
  - No personal ties, less commitment
  - Decision-making is chaotic on the Internet
Freedom of Expression: History

- De Scandalis Magnatum (England, 1275)
- Court of Star Chamber
- 18th century
  - No prior restraints on publication
  - People could be punished for sedition or libel
- American states adopted bills of rights including freedom of expression
- Freedom of expression in 1st amendment to U.S. Constitution
1st Amendment to U.S. Constitution

Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the government for a redress of grievances.
Freedom of Expression: Not an Absolute Right

- 1st Amendment covers political and nonpolitical speech
- Right to freedom of expression must be **balanced** against the public good
- Cannot falsely shout "fire" in a theater and cause a panic
- Jeremy James:
  - Convicted for millions of spam messages by Virginia state law
  - Overturned because antispam law was too broad

[AP Photo, M. J. Quinn]
FCC v. Pacifica Foundation et al.

- George Carlin records “Filthy Words”
- WBAI in New York airs “Filthy Words” (1973)
- FCC issues declaratory order to Pacifica
- Pacifica sues
- U.S. Supreme Court ruled FCC did not violate 1st Amendment (5-4 decision)
  - Broadcast media “uniquely pervasive”
  - Broadcasting uniquely accessible to children
What are problems that are related to the Internet?
Problems Related to the Internet

• Inappropriate Content
• Child Pornography
• Sexting
• Identity Theft
• Fake Reviews
• Online Predators
• False Information
• Cyberbullying
• Revenge Porn
• Internet Addiction
Challenges Posed by the Internet

- Many-to-many communications
- Dynamic connections
- Huge numbers of Web sites
- Extends beyond national borders, laws
- Hard to distinguish between minors and adults
Cyberbullying

- Use of the Internet or phone system to inflict psychological harm
- In a 2009 survey, 10% admitted to cyberbullying, and 19% said they had been cyberbullied

Cases:

- Ghyslain Raza (Star Wars Kid):
  - Personal videotape was discovered and uploaded
  - Dropped out of school
  - Estimated to have been viewed more than one billion times

- Megan Meier:
  - Relationship with "Josh Evans" on MySpace turned sour
  - Neighbors including older sister and mother involved in faking
  - Suicide

[M. J. Quinn]
Sexting

- Definition: sexually suggestive text messages or emails with nude or nearly nude photographs
- In a 2009 survey, 9% of U.S. teenagers admitted to sending a sext, 17% admitted to receiving a sext
- Usually an expectation that photos will be kept confidential…
- …but that isn't always the case
- Ting-Yi Oei: Assistant Principal investigated sexting, put evidence on his computer, police found later and charged him
Revenge Porn

- Special case of cyberbullying
- Posting pornographic image with malicious intent without consent of participant(s)
- "Is Anyone Up"?
- Jesse Logan:
  - Sent nude photos to her boyfriend
  - After breakup, boyfriend distributed to classmates
  - Suicide
- Phillip Alpert: emailed nude photo of girlfriend, charged with sending child porn, required to register as sex offender
- Criminalized in Germany, Israel, UK, and about half of U.S. states
- Reddit, Twitter, Google have taken action to protect victims

[M. J. Quinn]
Identity Theft

• A person fraudulently uses another person’s electronic identity
• Leading form of identity theft is **credit card fraud**
• Financial institutions contribute to problem by making it easy to open new accounts
• In 2012 about 7% of adults in U.S. reported being victims
• 50% of these victims reported losses exceeding $100
• Consumer’s liability for credit card losses limited to $50
Identity Theft

• Nearly half of cases from lost credit card, checkbook, etc.
• College students 5 times more likely to be victims
• In 19% of cases, credit card number stolen at time of making purchase (skimmers)
• About 1 million cases of identity theft annually in United States from online activities
• Phishing: Use of email to attempt to deceive people into revealing personal information
• Identity theft a federal crime, but only 1 in 700 cases results in an arrest
Fake Reviews

• Survey of North Americans in 2014
  - 88% used online reviews in past year
  - 39% read reviews regularly
  - Restaurants, hotels, doctors and dentists, beauty salons

• Significant percentage of reviews are fraudulent

• Yelp spends millions of dollars annually to identify and remove fake reviews
Online Predators

• Instant messaging: software supporting real-time “chat” over the Internet
• Kik Messenger, Whisper: popular apps
• Child predators use apps to find and gain trust of victims
False Information

- Quality of Web-based information varies widely
- Other media also have information of varying quality
  - The New York Times v. The National Enquirer
  - 60 Minutes v. Conspiracy Theory
- Google attempts to reward quality
  - Ranking uses “voting” algorithm
  - If many links point to a page, Google search engine ranks that page higher
  - Best model?
YouTube Recommendation

• "YouTube, the Great Radicalizer", Z. Tufekci, 2018
  - "Videos about vegetarianism led to videos about veganism"
  - "Videos about jogging led to videos about running ultramarathons"
  - "Its algorithm seems to have concluded that people are drawn to content that is more extreme than what they started with"
• "We designed [YouTube]'s AI to increase the time people spend online, because it leads to more ads" [G. Chaslot, 2019]
• Buckey Wolfe: "Seattle man who stabbed his brother to death with 4-foot sword thought he was a lizard, police say"
  - YouTube likes shows how he "fell down a rabbit hole"
• Google recently announced they will "begin reducing recommendations of borderline content and content that could misinform users in harmful ways"
Internet Addiction

• Electronic devices co-opt same brain systems indicated in addiction [R. Davidson]

• Variants of Internet addiction
  - Excessive gaming
  - Sexual preoccupations
  - E-mail/text messaging

• Characteristics of Internet addiction
  - Excessive use
  - Withdrawal
  - Tolerance
  - Negative repercussions

[M. J. Quinn]
Internet Addiction

- American Psychiatric Association: insufficient data to list as a mental disorder
- Addiction to gaming is listed though unknown if it is unique
- South Korea
  - Average high school student spends 23 hours/week gaming
Contributing Factors to Addiction

• Social factors
  - Peer groups

• Situational factors
  - Stress
  - Lack of social support and intimacy
  - Limited opportunities for productive activity

• Individual factors
  - Tendency to pursue activities to excess
  - Lack of achievement
  - Fear of failure

[M. J. Quinn]
Ethical Evaluation of Internet Addiction

• Enlightenment view
  - Individuals can and should govern their lives
  - People are responsible for their choices

• Jeffrey Reiman’s view
  - Addict’s behavior makes sense if addict has no hope for a better future
  - Society bears responsibility for putting people in hopeless situations