Spam

• Unsolicited bulk mail

• Drowns out other communication (see Monty Python)

• History
  – 1994 – lawyers sent message to 9000 newsgroups
    much negative response but also new business
  – 2000 8% of email is spam
  – 2007 75% of email is spam

• SPIM is spam on IM instead of email
• effective (really cheap vs. postal service)

• mailing lists
  – ”voluntary” opt-ins
  – dictionary attacks

• filters
  – AOL blocks 1 billion messages/day
  – spammers buy filters to refine messages

• spammers hide by changing email and IP addresses
  – easy, hard to trace, unpreventable
  – commandeer other systems to launch messages

• conceptual muddles, policy vacuums
  – Internet allows users to disguise email addresses
  – technology developed without social expectations
Ethical Analysis

- **Kantianism**
  - cost to recipients
  - only a few are interested
  - using most as a means to an end (profit)
  - no respect for recipients as an end in themselves

- **Act Utilitarianism**
  - focus on one act of spam
  - calculation based on unit profit, number spammed, purchase rate, average satisfaction, number satisfied, number dissatisfied, unit unhappiness to non purchasers
• Rule Utilitarianism
  – general case similar to above
  – expect a small percentage of positive responses (couldn’t handle large number)
  – as spam increases, users drop email accounts
  – as users decrease, usefulness of system decreases for spammers

• Social Contract Theory
  – right to free speech
  – right to not listen
  – advertiser contacts person who replies if he is interested or not
  – advertiser is careful not to generate lots of negative replies
  – because spammers may hide identity and motives, spamming is wrong
Making Spam Moral

- use correct return address and subject line
- send only to those who request
  * eliminates using people as a means to an end
  * eliminates cost of unwanted messages
  * restores the honesty of the "conversation"
Fighting Spam

• Blacklisting
  - IP addresses associated with spam are compiled
  - ISP buys list, blocks mail from those IP’s
  - includes known spam senders, solicitations for service to spammers, unsecured mail server or spamming port, dynamically assigned IP
  - ACLU – blacklisting restricts freedom of speech
  - harms innocents
  - Social Contract Argument: there should be equal benefit to sender and receiver
  - Utilitarianism: utility depends on percentage of innocents blacklisted
  - Kantianism: innocent blocked users are a means to an end (blocking spam)

• require explicit opt-ins
• require truth in labeling
• charge for sending email (hijacked IP’s ?)
• ban unsolicited email (1991 – unsolicited faxes banned)
• CAN SPAM Act 2003
  
  - **Controlling the Assault of Non-Solicited Pornography and Marketing Act of 2003**
  
  - Fines: $250/message up to $2 million. Five years in prison for hacking to launch spam
  
  - Preempted stronger state laws
Three Categories of Business Email with nested rules

1. ongoing business relationship
2. recipient opted in or failed to opt out of list
3. unsolicited

Category 1

* header, sender, origin and transmission info must be correct
* identity of originating computer must not be disguised

Category 2

* category 1
* recipient is informed he can opt out of list
* message must provide an internet based mechanism for 30 days for opting out
* message must contain sender’s postal address

Category 3

* category 1 and category 2
* clear and conspicuous notice that it is an ad. sexual explicitness must be noted in subject line