

Email Spam and the Ethics of Antispam measures

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What is an Email Spam?

- Emails that are sent to someone without that person's "consent"
- Emails that are commercial in nature.
- Number of identical messages that are sent

Unsolicited Electronic Messaging

Some facts about Email Spam

- The laws that exist have not been successful at significantly reducing Email spams.
- About 80% of Email traffic is spam.
- The first spam goes back to a telegram sent in 1904.
- The first commercial spam was in 1994 sent by two lawyers trying to solicit business.
- Spim is instant messaging spam.

Characterization of Spam

- Spam can not be defines simply as “unwanted email”, because
 - An email that is from an unsolicited, commercial, bulk emailing may provide a receiver with something that he/she does want.
 - Counter example: email informing someone that he/she is fired, is unwanted but not spam.

Characterization of Spam

- Content of the Email
- Intent of the sender
- Consequences to the receiver
- Consent of the receiver
- Relationship between the sender and receiver
- Accountability of sender and degree of deception
- Number of identical emails sent
- Illegality
- Size of the message

Characterization of Spam

TABLE 21.1 Examples of Characteristics That Can Range from “Not a Problem” to “Serious Problem” for Emails

Dimension That Matters	Benign or Better	Bad or Worse
Content of message	Birthday party invitation	Debilitating virus
Sender’s intent	Inform friends	Steal identity
Consequences to receiver	Gain valuable information	Lose life savings
Consent of receiver	Voluntarily joined group	Desperately wants out
Sender/receiver relationship	Close personal friend	Predator/victim
Accountability and deception	Genuine return address	Spoofed address
Number of emails sent	Less than ten	Several millions
Legality	Legal meeting notice	Illegal bank fraud
Size of a message	Less than a kilobyte	More than a gigabyte

Envisioning the Spam space

- Senario1: An email
 - includes a birthday invitation
 - only has six recipients
 - includes no virus
 - includes the senders correct physical and email address
 - Is sent to personal (nonbusiness) accounts

Envisioning the Spam space

- Senario2: An email
 - has millions of copies
 - includes a virus, spyware, and a phishing attack
 - is a gigabyte in size
 - includes the senders who wants to defraud the recipients
 - has a return address that is spoofed

Two Ethics Comments

- 1) If it is acceptable for A to deceive B in an email, it must be acceptable for B to deceive A?
 - To ethically evaluate our ethical policies requires both a consequentialist analysis and a justice analysis.
- 2) The test for ethical policies
 - What if everyone did it?
 - What if everyone were allowed to do it?

Envisioning the Spam space

- Deceptive Emails meant to defraud are condemned, Spam or Not
 - If a sender uses an email to attempt to defraud any recipients for the sender's selfish gain, the sender is blameworthy.
 - How about deceptive emails engineered by law enforcement?

Envisioning the Spam space

- Emails between well-meaning friends are probably not Spam
 - There is typically an implicit consent shared among people who know each other that “unsolicited” emails are allowed, as long as that consent is not abused.
 - This is not to suggest that senders do not have responsibilities toward receivers when the receivers are the sender’s friends.

Envisioning the Spam space

- Unsolicited commercial bulk emails (UCBE)
 - As long as there is a prospect for increased sales with more emails sent, UCBE projects are likely to grow in space.
 - The cost of sending emails is borne by the sender, while the cost of dealing with the emails sent is borne by the recipient.
 - Should commercial messages be allowed on the Internet?

Envisioning the Spam space

- Unsolicited commercial bulk emails (UCBE)
 - Do you think that all advertisements are fundamentally biased and likely to be inherently deceptive (F-UCBE)?
 - Or do you think that there are also advertisement emails that are not fraudulent (NF-UCBE)?
 - A non-fraudulent email can include emails from a company X that is contacting costumers who have previously done business with X.
 - It is analogous to physical “junk mail”

Envisioning the Spam space

- F-UCBE is not as complex in ethical analysis as NF-UCBE. However, moral and legal limitations against fraud are needed for an analysis of F-UCBE

Ethics of Antispam measures

- In ethical analysis, there a three-part division of policies
 - Everyone would impartially accept it as an ethical public policy
 - Sending a friendly birthday request
 - Nobody would accept it as an ethical public policy
 - Sending a virus
 - There is disagreement as to whether they should be accepted as ethical public policies
 - Such as the NF-UCBE

Ethics of Doing Nothing

- If no action is taken against spams, email would become unusable for many people and would then become abandoned by many users.
- Then potentially spam could lose its importance, and the Internet might become more usable again.
- But there are many drawbacks to this method.

Why Do Nothing is unlikely to be practical

- It is very close to the classic example of “spoiling of the commons”
 - If Internet (as the commons) becomes unusable because of spam, then it is spoiled for all, including the spammers.
 - It has dramatic consequences on many stakeholders, such as spam senders and receivers, Email delivery service providers, antispam vendors, etc.

Ethics of Reducing the Number of Spam Emails Read After They Are Sent

- Antispam measures seek to remove spams using *spam blockers* such as
 - Blacklist
 - Blocks emails on the basis of the sender's email address
 - Whitelist
 - Allows a user to specify senders whose messages are allowed
 - Filters
 - Identifies spams based on the content or address
- Spam blockers reduce the negative effects on individual users, but they do nothing to reduce the bandwidth required to carry the spam

Ethics of Reducing the Number of Spam Emails Read After They Are Sent

- False Negative
 - Occurs when a spam blocker allows an email that the recipient think is spam to reach the recipient.
- False Positive
 - Occurs when in in attempting to block spam, the blocker additionally blocks an email that the recipient would not have labelled spam.

Ethics of Reducing the Number of Spam Emails Read After They Are Sent

- Where should the location of responsibility for antispams be?
 - Internet service providers (ISPs)
 - System administrators
 - End users
- Spammers pay their ISPs for sending spam

Ethics of Suggestions to Reduce the Number of Emails Sent

- If the number of spam emails sent is reduced at the source, this helps the Internet as a whole.
- But, efforts to reduce the sending of spam emails have so far not resulted in anything like the elimination of spam emails.

Ethics of Suggestions to Reduce the Number of Emails Sent

- Changing the economics of Email
 - In the current model, bandwidth is usually charged
 - Alternatively, senders could be charged according to each Email sent.
 - However, economic schemes would have limited effectiveness unless all ISPs adopted them.

Ethics of Suggestions to Reduce the Number of Emails Sent

- Legislate against the sending of Spam
 - It has worked in the past
 - However
 - state or national laws, do not reach across political boundaries.
 - definition of a spam is an issue.
 - in case the return address is spoofed, prosecution of the true source of the spam email is complicated.