



*National Computer Board*

# The Spam Problem

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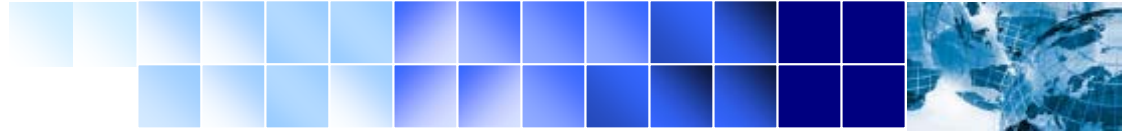
**19<sup>th</sup> February 2007**



# Agenda

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- ▶ **What is SPAM?**
- ▶ **Types of Spam**
- ▶ **Spam Evolution**
- ▶ **Scope and Extent**
- ▶ **Spamming in Mauritius**
- ▶ **Spam Related Issues**
- ▶ **Conclusion**

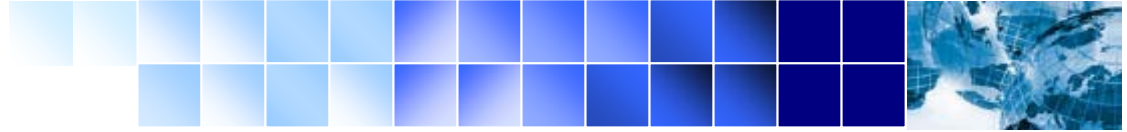


## What is SPAM?

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- ▶ **No agreed universal spam definition**
- ▶ **Confusion on what is spam and not! – end users subscribing to e-newsletters, etc.**
- ▶ **Definition adopted by the Anti-Spam Committee – inspired by the Australian and European Union definitions**

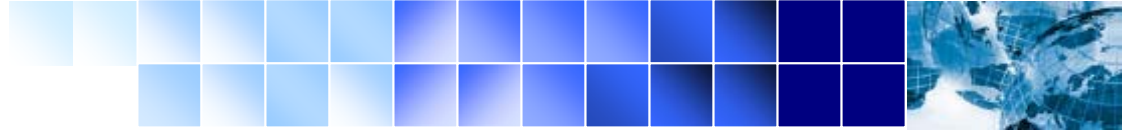
**“Unsolicited communications sent in bulk over an electronic media such as e-mail, mobile (SMS, MMS) and instant messaging services, usually with the objective of marketing products or services”**



# Types of Spam

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- ▶ **Online Pharmacy spam**
  - Spam promoting generic versions of Viagra, Cialis, Anti-depressants that can be purchased online.
- ▶ **Penny Stock spam**
  - Stock hyping spam, encouraging people to buy cheap stocks so that spammers can gain a return on their investment.
- ▶ **Porn or sex-dating sites spam**
  - Porn-sites and sex dating sites are often marketed via spam.
- ▶ **Pirate Software spam**
  - Pirate software manufactured in the Far East, is often marketed via spam.
- ▶ **419 scams**
  - Often called 419 scams after the relevant section of the Criminal Code of Nigeria; These are a form of “Advance Fee Fraud”
  - Usually a plea for help to recover millions of dollars from a bank account in a foreign country.
- ▶ **Lottery spam**
  - Similar to the 419 Advance Fee Fraud, these spam will tell you that “You have already won X Million” in order to try to extract transfer fees etc.



# Types of Spam

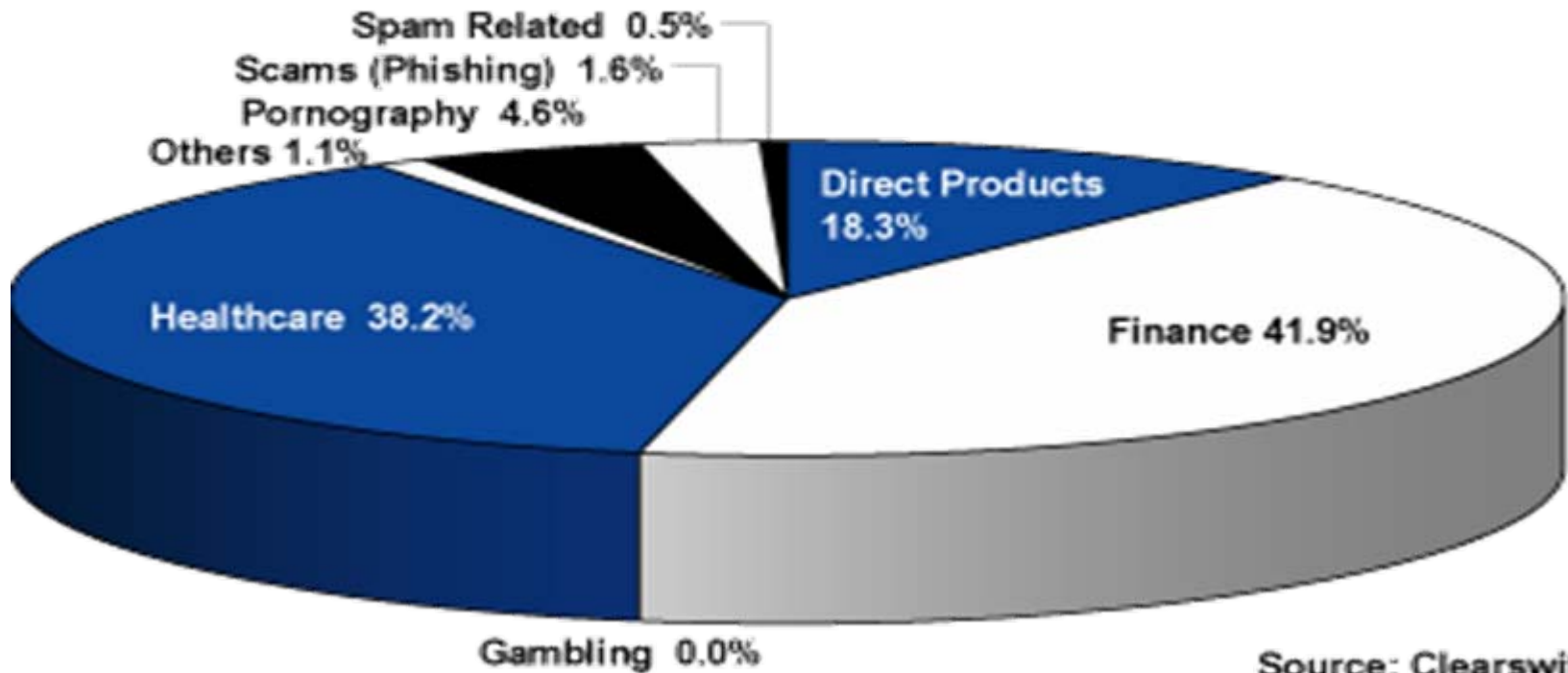
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- ▶ **Phishing spam**
  - Fake alerts from Banks, PayPal, Ebay extra, asking for confirmation, validation or monitoring of details
  - These link to fake login sites which can be used to capture user details (passwords etc) and this information can then be used to steal money or goods.
- ▶ **Online Casino spam**
  - Spam promoting gambling in online casinos
- ▶ **Fake Degrees spam**
  - Spammers often try to sell fake Degrees and Diplomas.
- ▶ **Mule job spam**
  - Promoting jobs “working from home” (which are typically scams, or mule jobs – laundering money or forwarding stolen goods)
- ▶ **Foreign language spam**
  - Sometimes difficult to tell with these, however, if you are receiving messages in Russian, Chinese, Korean, etc (and you don’t speak these languages) then they are likely to be spam.
- ▶ **Direct product marketing for other products**
  - A very small proportion of the spam total

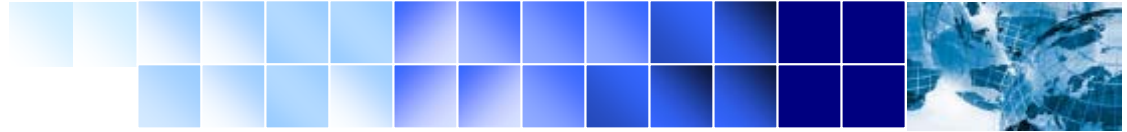


# Types of Spam

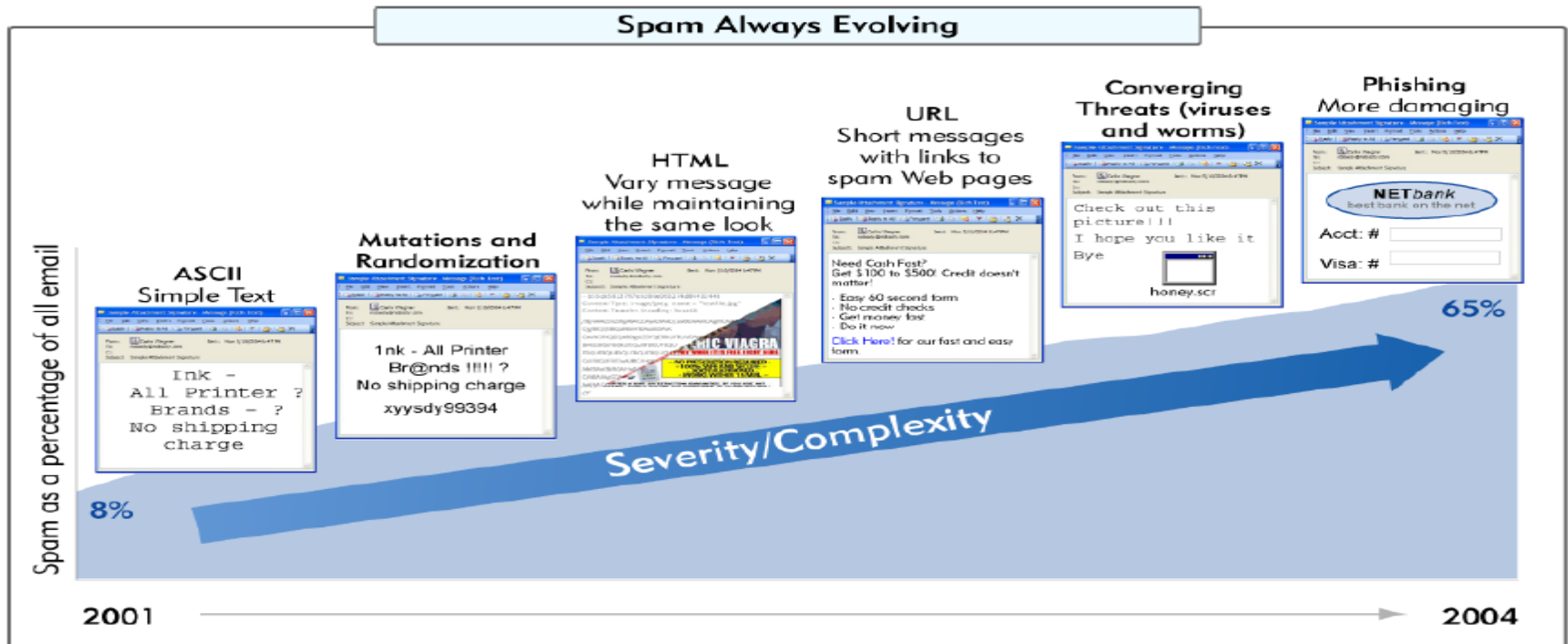
Monthly Spam Categorization Breakdown  
Oct 2005

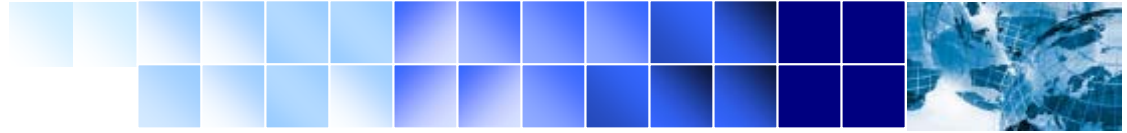


Source: Clearswift



# SPAM Evolution

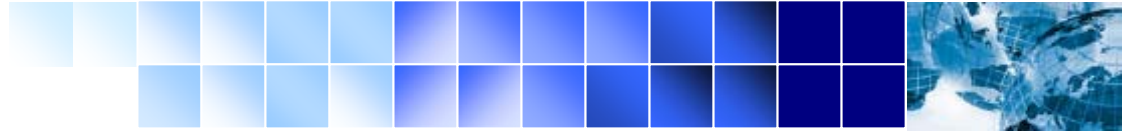




## Scope and Extent (Global)

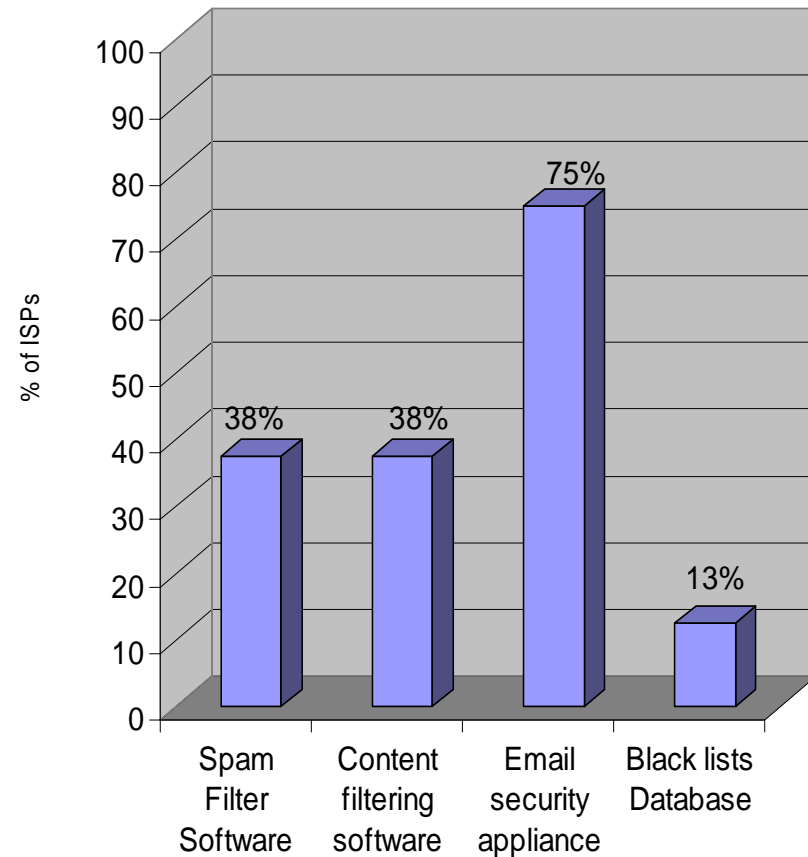
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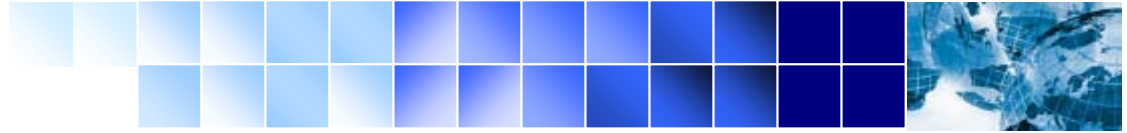
- ▶ **80% of Internet e-mail is considered as spam** – *International Telecommunication Union (ITU), 2004*
- ▶ **35% of Internet e-mail is considered as spam** – *International Telecommunication Union (ITU), 2003*
- ▶ **The estimated costs of spam to the global economy are approximately US\$25 billion dollars per year** – *2005*
- ▶ **63 billion spam messages were sent each day** – *IronPort systems, October 2006*
- ▶ **31 billion spam messages per day** – *IronPort systems, October 2005*



# Spamming in Mauritius

- ▶ **Spam Study at Level of ISPs - NCB, September 2006**
  - 74% of ISPs reported that they receive more than 500 spam e-mails on a daily basis.
  - 75% of ISPs are using e-mail security appliances as technological measures to protect against spam
  - 62% of ISPs mentioned that more than 70 % e-mails received from overseas are spam
  - 25% of ISPs reported having received complaints from subscribers regarding spam email

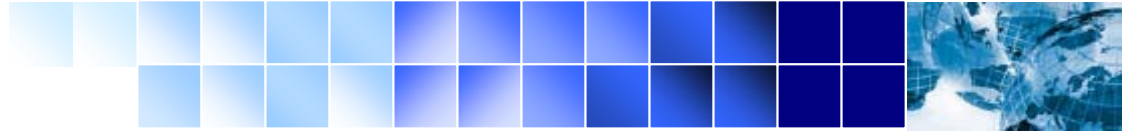




# Spam Related Issues

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- ▶ **Costs To Consumers**
  - Annoying or offensive to consumers
  - Imposes additional costs especially on individuals who access the network through pay-per-use or low bandwidth connections
- ▶ **Overheads for Businesses**
  - Employees may spend substantial amounts of work time sorting through email messages
  - Legitimate email related to their work and spam.

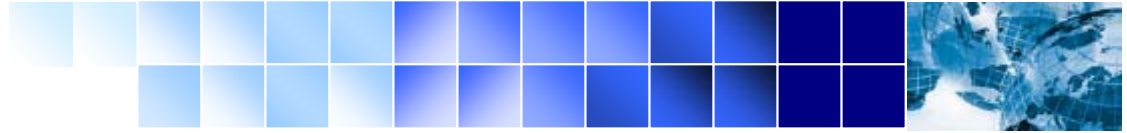


# Spam Related Issues

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## ▶ **Invasion of Privacy**

- Spammers use “zombie” computers to hide the true origin of the spam from consumers and make it more difficult for law enforcement to find, them.
- Spam may violate national law – e.g. if it constitutes an invasion of privacy (e.g. spyware), leads to malicious attacks on their personal property (e.g. viruses).
- Spammers may use software that allows them to hijack consumers’ home computers and route spam through them.



# Spam Related Issues

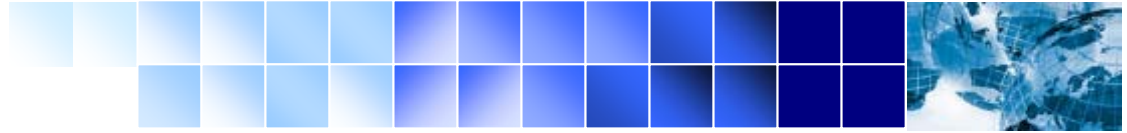
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## ▶ **Phishing and Fraud**

- Spam provides a cover for other forms of cyber crime
  - Identity theft through “phishing”
  - And other forms of online fraud

## ▶ **Spreading of viruses and spyware**

- Spam provides a cover for spreading viruses, worms, trojans, spyware, etc.
- Sent as attachments to e-mail messages



# Spam Related Issues

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## ▶ **Additional Costs To ISPs**

- Spam requires investment in a range of tools that are needed to counter spam
  - Anti-spam technologies (e.g. filtering technologies)
  - Server and transmission capacity
  - Human resources
  - Anti-spam information sharing, cooperation, and regulatory structures



# Conclusion

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- ▶ **Spam**
  - Spam is on the increase
  - Impact is at multi-level
  - Is used
    - To Transmit malwares
    - As a vehicle for Identity Theft/Phishing



# The Spam Problem

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Thank you for your attention