Evolution of Cybercrimes

1.0 Traditional Crimes.

2.0 Developments in ICT – New ways and means.

Examples:

- Online Bank Robbery

“Cybercrimes - traditional crimes committed in more sophisticated ways.”
Evolution of Cybercrimes

Seven cyber hackers 'stole $45 million in just 10 hours' by draining cash machines in one of world's biggest ever bank heists

- Hackers made 40,500 transactions in 10 hours in 27 countries
- Data was stolen from cards issued by two Middle Eastern banks
- Branded the second-biggest bank robbery in the history of New York City

By REUTERS REPORTER
PUBLISHED: 16:34 GMT, 9 May 2013 | UPDATED: 13:29 GMT, 10 May 2013

“Cybercrimes - traditional crimes committed in more sophisticated ways.”

2.0 Developments in ICT – New ways and means.
Examples:
- Online Fraud

“Cybercrimes - traditional crimes committed in more sophisticated ways.”

Examples:
- Online Stalking

“Cybercrimes - traditional crimes committed in more sophisticated ways.”
Evolution of Cybercrimes

3.0 Developments in ICT – New types of targets.
Examples:
- Computers, Servers – hacking, introduction of viruses, etc.
- Websites – hacking, defacement, DDoS, etc.
- Databases - Hacking, theft of information, etc.

4.0 Developments in Internet Technology
Examples:
- Phishing, Pharming.
- Email Spoofing.
- Email Hijacking.
- Malware

Social Engineering

In social networking, anybody can pretend to be somebody else that you know, will try to enter your circle of friends, will penetrate your privacy settings and steal confidential information without you suspecting that somebody has successfully breached your account and is freely monitoring all your activities.
Cybercrimes

Why cybercrimes continue to flourish?

1. Anonymity.

Anonymizer

https://www.torproject.org/about/overview
Cybercrimes

Why cybercrimes continue to flourish?

3. Global / Jurisdictional Issues

Cybercrimes

What motivates people to commit cybercrimes?
Cybercrimes

Harassment  Stalking

Cybercrimes

Political Reasons

USA

-21%

In 2012, the U.S. accounted for half of all phishing in the world. Today it's less than 40%.

IRAN

235%

Iran saw the biggest spam boom in 2013, but it still sends just 5.3% of all spam worldwide.

Cybercrimes

Cybercrimes

Espionage

Financial Gains
Cybercrime: “Crime of the Century”

2012 Norton study: Consumer cybercrime estimated at $110 billion annually.
(http://www.symantec.com/about/news/release/article.jsp?prid=20120905_02)

The study is aimed at understanding how cybercrime affects consumers, and how the adoption and evolution of new technologies impact people's security. With findings based on **self-reported experiences** of more than 13,000 adults across 24 countries, the 2012 edition of the Norton Cybercrime Report calculates the direct costs associated with global consumer cybercrime at **US $110 billion** over the past twelve months.

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Cybercrime: “Crime of the Century”

*HP Reveals Cost of Cybercrime Escalates 78 Percent, Time to Resolve Attacks More Than Doubles*

Fourth annual study confirms security intelligence solutions mitigate impact, saving average of $4 million annually per organization

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Cybercrime: “Crime of the Century”

Key findings from the 2013 study include:

- The average annualized cost of cybercrime incurred per organization was $11.56 million, with a range of $1.3 million to $58 million. This is an increase of 26 percent, or $2.6 million, over the average cost reported in 2012.[(2)](http://www.symantec.com/about/news/release/article.jsp?prid=20120905_02)

- Organizations experienced an average of 122 successful attacks per week, up from 102 attacks per week in 2012.[(3)](http://www.symantec.com/about/news/release/article.jsp?prid=20120905_02)

- The average time to resolve a cyberattack was 32 days, with an average cost incurred during this period of $1.035,769, or $32,469 per day—a 55 percent increase over last year’s estimated average cost of $591,780 for a 24-day period.[(1)](http://www.symantec.com/about/news/release/article.jsp?prid=20120905_02)

“The threat landscape continues to evolve as cyberattacks grow in sophistication, frequency and financial impact,” said Frank Mong, vice president and general manager, Solutions, Enterprise Security Products, HP. “For the fourth consecutive year, we have seen the cost savings that intelligent security tools and governance practices can bring to organizations, and as HP, we are committed to continuing to deliver both industry-leading solutions and research to further disrupt the threat life cycle of the adversary.”

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**Figure - Estimated cost of cybercrime (TrendMicro)**
Cybercrime: “Crime of the Century”

Report: Cybercrime and espionage costs $445 billion annually

A Washington think tank has estimated the likely annual cost of cybercrime and economic espionage to the world economy at more than $445 billion — or almost 1 percent of global income.

The estimate by the Center for Strategic and International Studies is lower than the eye-popping $5 trillion figure cited by President Obama, but it nonetheless puts cybercrime in the ranks of drug trafficking in terms of worldwide economic harm.

• signed into law on 12 September 2012
• 09 October 2012 – Supreme Court issued a Temporary Restraining Order (TRO) on the R.A. 10175 effective for 120 days
• 05 February 2013 – SC issued another TRO against the implementation of the law until further notice
• 18 February 2014 – Supreme Court ruled and uplifted the constitutionality of the law
• 22 April 2014 – SC denied all Motions for Reconsideration
• Cybercrime Offenses:
  • Offenses against the confidentiality, integrity and availability of computer data and systems:
    • Illegal Access
    • Illegal Interception
    • Data Interference
    • System Interference
    • Misuse of Devices
    • Cyber-squatting

• Cybercrime Offenses:
  • Computer-related Offenses:
    • Computer Related Forgery
    • Computer Related Fraud
    • Computer related Identity Theft
  • Content-related Offenses
    • Cybersex
    • Child Pornography
    • Libel

Applicable Laws
1. RA 8792 – E-commerce Law
2. RA 8484 – Access Device Act
3. RA 9775 – Anti-Child Pornography Act
4. RA 9995 – Anti-Photo and Video Voyeurism Act
5. RA 10364 – Expanded Anti-Trafficking in Persons Act.
6. RA 9372 – Human Security Act

Current Bills pending:
1. Senate Bill # 53 – Magna Carta for the Philippine Internet Freedom
2. Electronic Violence Against Women

‡ February 20, 2014
‡ NDUHULUPA Cybersex Den Raid
‡ 11 persons arrested
- November 2013
  - RA 8792
  - 1 person arrested

- June 2014
  - RA 9995 and RA 9776
  - 1 person arrested

- March 2014
  - RA 10175
  - 2 persons arrested for Card Hacking

- May 2014
  - RA 10176
  - 100 persons arrested
Questions

Contact Details

RONALD P. AGUTO JR.
Head Agent
Chief Cybercrime Division
National Bureau of Investigation

mail: rpaguto@nbi.gov.ph
Mobile Number: 09196318949