

*Cybersecurity Issues*



# ✓ *Topics of Cybersecurity on our economy.*

- What is cyber crime -



- Cases of these countries -



- Cases of Korea -



# Reasons?

- Security Loopholes
- Certification issues
- Bad Intention
- Lack of awareness (password authentication)

# Who are the actors?

- Government Bodies
- Private sectors
- International Society
- Citizens

# Impact of Cyber Attack?

Breaches on:

- Confidentiality
- Integrity
- Availability
- Example: In 2016 in Bangladesh there was a massive attack on their central bank and hacker stole more than USD 1 Billion by stealing bank credential

# Challenges?

- Can not ensure 100% security
- Lack of Finance & Technical Skill
- Financial burden for certification.
- Lack of strong policy

# Suggestion

- Raising awareness to end user
- CERT
- Strong Cyber Security Policies
- ???

# ✓ *What is cyber crime.*



- *McCusker has identified number of offences in three sets as cybercrime threats, i.e., offences against the confidentiality, integrity and availability of computer data and systems.*
- *Cyber crime is usually conducted by people who have bad intentions and causes many losses. These hackers find the weak points of security and managing these security holes are major challenges.*





- According to statistics of the Vietnam Computer Emergency Response Team (VNCERT), there have been more than 9,300 cyber attacks targeting Vietnamese websites in 2018.
- However, by the end of the first quarter of 2019, the number of cyber attacks on Vietnam has decreased markedly, this is a very encouraging signal.



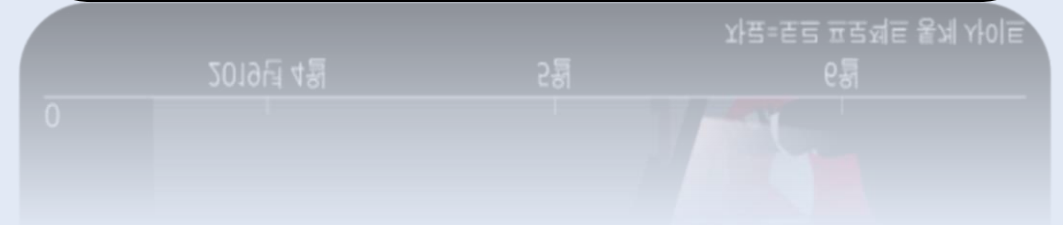
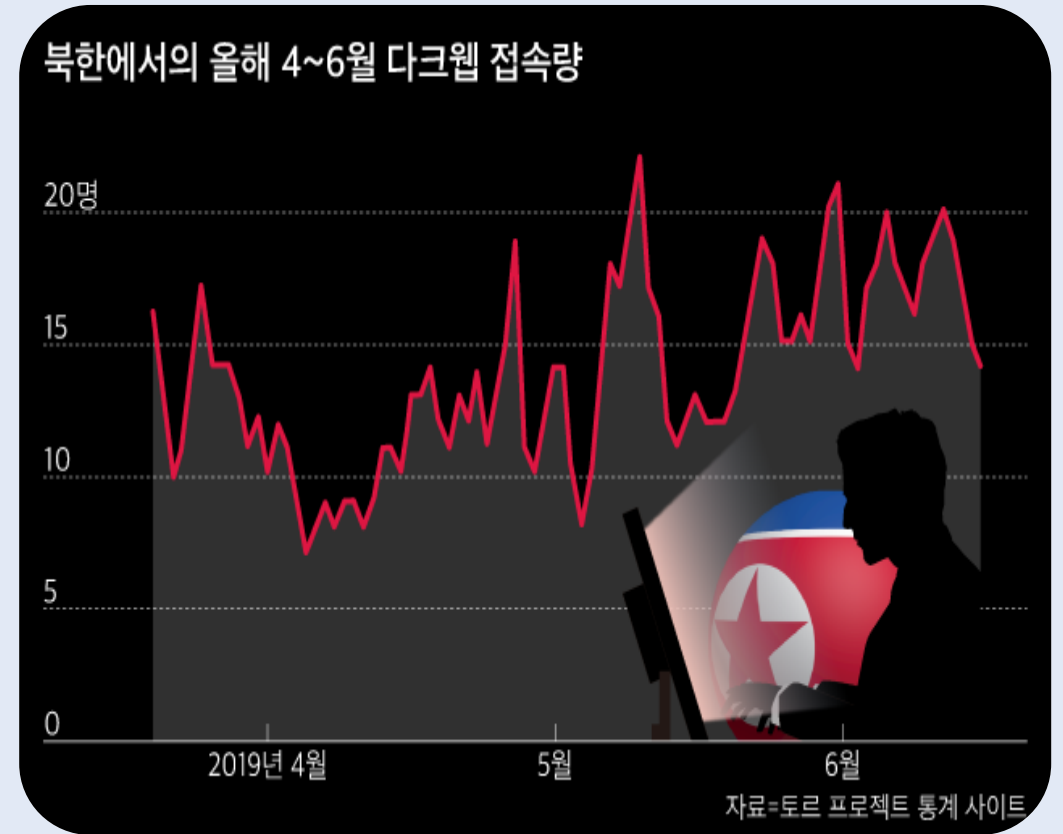
- During the press meet of CISCO, Sunina Ghimire Pandey, Vice President of CAN Federation, informed around 800 cyber crimes occurred in 2018
- Cybercriminals in Nepal was usually withdrawing money through fake ATM cards, swindling using social media and more.
- Defrauding from social media, hacking bank account, stealing personal or org's data, call bypass are the major activities carried out by cyber attacks in Nepal.



***- Cyberattacks by North Korea. -***

# - Cyberattacks by North Korea. -

- With the beginning of Information Society, North Korea raised hackers and conducted cyber attacks towards South Korea's private and public sectors.
- Until 2015, North Korea conducted hacking 35 times to 17 countries' banks including South Korea.
- This hacking is lead systemically by North Korean government, so it can cause more serious damages



# - Difficulties and solutions on this problem-

## - Difficulties -

- Compared to other private hackers, hackers from North Korea are protected by the government. This makes things difficult to catch hackers.
- Many of these hackings are committed to the military or government organizations, it is hard to get helps from private area.
- Under the presence of North Korea, South Korea always contains big potential dangers on security issues.

## - Solutions -

- In fact, there is no 100% protection from cyber attacks. So really sensitive information should not be on networks.
- Collect data of organizations attacked by North Korea and reinforce the cybersecurity on those agencies..
- We need to build resilience against their attack because we cannot block their attack perfectly

**CYBER SECURITY IS  
EVERYONE'S  
RESPONSIBILITIES**

# Digital Divide

Group 1

## Internet Statistics July 2019 (We are Social, Speedtest & Hootsuite)

<b>COUNTRY</b>	<b>TOTAL POPULATION</b>	<b>INTERNET PENETRATION RATE</b>	<b>AVE INTERNET SPEED</b>
<b>Cambodia</b>	16.36 Million	76% (12.5 Million)	12.42 Mbps
<b>Indonesia</b>	268 Million	56% (150 Million)	11.01 Mbps
<b>Japan</b>	126 million	79.8%(101 Million)	30.74 Mbps
<b>Korea</b>	51 Million	95.9%(49 Million)	90.06 Mbps
<b>Philippines</b>	107 Million	71% (76 Million)	19.51 Mbps

# Introduction

**Access** is being able to utilize the existing and future infrastructure for the optimal or at least the minimal use of the internet

**Digital Divide** is any gulf between an individual and the internet. It can be social, economic, or technical inhibition

Behind this: *State of connectivity, Availability, Affordability, Relevance, Readiness*



# Developing Countries

## Cambodia, Philippines, Indonesia

### Specific Issues about Accessibility

**Cambodia:** Lack of Infrastructure, Investment, Cooperation, Affordability.

**Indonesia:** Geographical conditions, Community Dynamics and Population distribution, technology

**Philippines:** Affordability, Increase Cost in Rural Areas, No Transparency in Private Governance, No neutral platforms for measuring metrics of ISPs

# Developing Economies

## Cambodia, Philippines, Indonesia

### Actors behind the Challenge

**Cambodia:** Government, Private Sector, End Users.

**Indonesia:** Government, ISP, Multistakeholders

**Philippines:** National government, Telcos, CSOs, Local Governments, Academe, Small & Medium Enterprises

# Developing Economy

## Technical and Legal Hurdles

**Philippines:** Outdated laws (ISP must be a telco, must have 1 million subscribers and have a congressional franchise), all tech people are in private sector, national government or national university, IG is Private Prerogative, Inter-island fiber & wireless infra is privately owned, ccTLD is privately owned

# Developed Countries: Korea, Japan

## Specific Issues on Digital Divide

exclusion of older generation

## Actors behind the Challenge

- 1) government
- 2) less fortunates
- 3) local government
- 4) major company in electronics

## Technical and Legal Hurdles

Nature protection law against developing infrastructure

# Proposed Solutions from Developing Economies

**Indonesia** Indonesia Government investment on infrastructure to build a better technology in internet network. In addition, the government also pays great attention to policies from the upstream side. That is an increase in the society's digital literacy comprehensively and massively.

**Philippines** Legislate 'Open Data Access Transmission Act' (Enable non-telcos be ISPs), Local Govts can circumvent the limitation through Local Government Code as infra providers, Cooperatives & National University can use loophole to be last-mile connection providers, increase IG awareness beyond major cities (Manila, Cebu and Davao), advocate for low-cost community networks, more submarine cables

# Proposed Solutions from Advanced Economies

. Republic of Korea & Japan

- 1) Strong government focused on selected companies
- 2) Government policy on reselling used devices

# Solution Summary

Depends on countries

Control the ratio of regulation and free market

- Developing countries: high regulation and low free market
- Developed countries: high free market and low regulation

**THANK YOU FOR  
LISTENING!**