# CYBERSECURITY FOR MOBILE DEVICES

A COMPILATION OF INFOGRAPHICS FROM ASEAN COUNTRIES





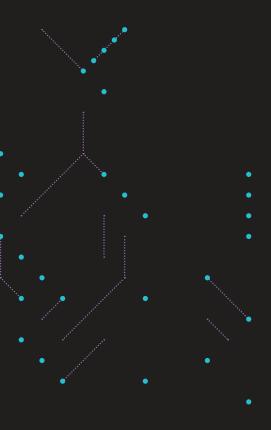


## Introduction

The increased use of smartphones and other smart devices has made life more convenient. At the same time, it has also exposed us to risk from cyber threats such as online scams and data theft.

With the COVID-19 pandemic triggering a surge in digitalisation and e-commerce, the attack surface for cyber criminals has correspondingly increased. It is now more urgent than ever for government agencies to increase public awareness of cybersecurity and the need to adopt measures to protect our devices and data.

At the First ASEAN-Japan Cybersecurity Working Group Online Meeting on 18 Feb 2021, ASEAN Member States and Japan agreed to work on building cybersecurity awareness through collaborative efforts. This compilation of infographics by ASEAN Member States and Japan based on the theme, "Cybersecurity for Mobile Devices", is an initiative to bring countries together to share best practices and exchange public education resources. More importantly, it aims to help the citizens of the ASEAN-Japan community navigate cyberspace safely.



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Two-Factor Authentication

## Two-Factor Authentication

or Multiple Factor Authentication is when a user successfully presents two or more pieces of evidence to an authentication device to gain access to his mobile device.



**Examples of Two-Factor Authentication** 

## Password & E-mail Verification

Good on you for keeping your account se Password Here's your authentication code: • • • • • • What to do if you didn't request this email
This email is sent automatically when you log into your MYOB account. If you haven't logged in recently, someone else might be trying to access your account.

### **Password & SMS Code Verification**



## PIN Code & SMS Code Verification



## **Enable Two-Factor Authentication On Your Social Media Accounts**



#### **WhatsApp**

Settings > Account > Two-Factor Verification



#### **Facebook**

Settings & Privacy > Settings > Security & Login > Use Two-Factor Authentication



### Instagram

Settings > Security > Two-Factor Authentication



#### **Twitter**

Settings and privacy > Account > Security > Two-Factor Authentication



### LinkedIn

Settings > Sign In & Security > Two-Step Verification



### Telegram

Settings > Privacy & Security > Two-Step Verification



### **Apple ID**

Settings > [Your Apple ID] > Password & Security > Turn on Two-Factor Authentication



## **Google Account**

Go to https://myaccount.google.com > Security > Select 2-Step Verification > Follow the instructions to turn on 2-Step Verification

An initiative by



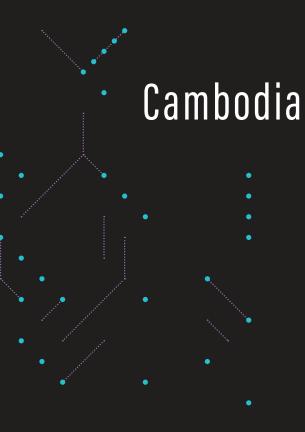
A team under

Learn more about online safety





BRUCE



Mobile Password Management



# MINISTRY OF POST AND TELECOMMUNICATIONS GENERAL DEPARTMENT OF ICT DEPARTMENT OF ICT SECURITY



## MOBILE PASSWORD MANAGEMENT



Set up unique password / pin / passcode not related to your personal information







Lock your device with strong password / pin / passcode







Use biometrics to unlock your device (Ex. facial recognition or fingerprint access )





Use unique and separate password for each account and app on your device

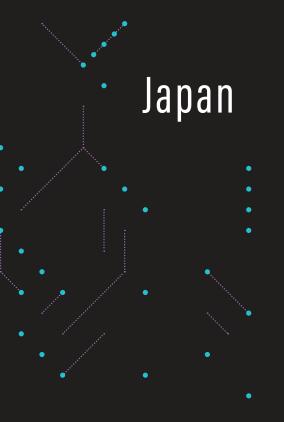
Don't reuse old password





Two-Factor Authentication





Patch Your Psychological Security Hole

# Patch Your Psychological Security Hole

## Resistance to Social Engineering

Starting with searching trash cans, this method has been used for all kinds of fraud, including money transfer fraud such as "leading a person into a situation where they cannot make rational decisions", methods of controlling the other party's behavior to extract necessary information, or in many cases where important information is stolen because of believing that "no one is watching" or "no one would be looking without permission" or letting your guard down. Company information and personal information are important assets. To protect your assets, be wary of "vulnerabilities of the mind"!

# What Is a "Social Engineering"?

This is a method of stealing vital information such as passwords that are needed to break into networks. Many of these methods take advantage of the psychological vulnerabilities of humans and behavioral mistakes.



The pattern lock

is Z-shaped

# Social Engineering in the digitalized generation

Social Engineering in the digitalized generation also uses manipulation in the same way.

## "Shoulder Hacking"

For example, as a way to obtain valuable information without direct contact with the target, the PIN code or pattern lock of someone using their smartphone on the train can be stolen using "Shoulder Hacking" while standing behind them.



"Trashing"

Going through garbage cans, a technique that does not require direct contact with a target.

Use a shredder, etc. to ensure that documents or DVDs data cannot be restored!







Make sure to confirm

on the other end of the phone!

the identity of the person

"Name Dropping"
"Hurry Up"

"Name Dropping" (Eliciting information by appearing to have authority), and "Hurry Up" (To get information by rushing a target) to control the situation where the target cannot think normally, elicit the necessary information or have the target perform a requested action.

## Classic Social Engineering

For scams in general, including bank transfer scams, calling it "a commonly-used social engineering technique that targets psychological security holes" gives you an idea of its nature.





# "Looking at Finger Traces on the screen"

Or the pattern lock of a smartphone left on a table can be discovered by picking it up and looking at the finger traces on the screen.

By identifying how to unlock the smartphone in advance, you can obtain all of their other personal data by stealing their smartphone later.

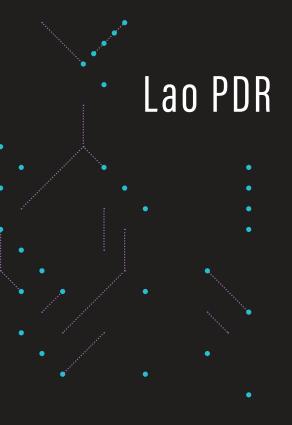


**Never leave** 

your smartphone

or tablet unattended

even for a short time!



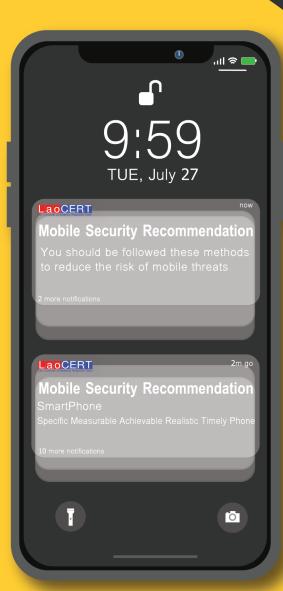
Mobile Security Recommendation

# Mobile Security Recommendation You should be followed these methods to reduce the risk of mobile threats



Use a strong password to lock the screen







Check privacy and security, Especially turn on finding my phone



Keep your phone software updated



Don't save essential information on mobile phone



Be careful when connecting to free Wi-Fi, Especially do not process any financial



Be careful before click links

occurred from a lack of understanding of how to use mobile safety, so awareness-raising is the most essential.

99% of mobile threats

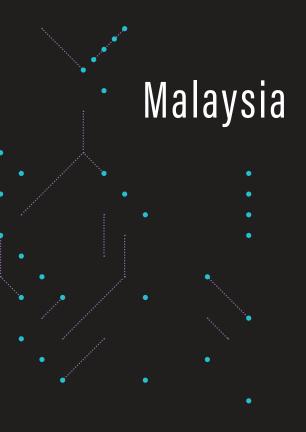
Don't forget to log out from the application when you are not used











Online Presence Security

# Online Presence Security





What is online presence?

Online presence is **any existence** of an individual, organization or business that can be found via an online search or the **internet** 









Why
we need
online
presence
security?









What are the dangers during online presence?



Cyberbullying





Turn-off
'Save
Password'
feature in web
browser

Use Two-Factor authentication

Do not share personal information

Use strong and unique password for every login

Avoid using public wi-fi

Make online purchase from secure site

How
can we
protect our
online

presence?

Perform routine Back-up

online

Install and update an antivirus in every device



Ransomware in Mobile Device

RANSOMWARE MOBILE DEVICE

**Android 5%** 

**iOS 3%** 

**Mac OS 7%** 

Window 85%

Source: purplesec.us

## **TYPES OF MOBILE RANSOMWARE**



Lock-screen types



▶ File-encrypting type





**Damage costs** predited to reach

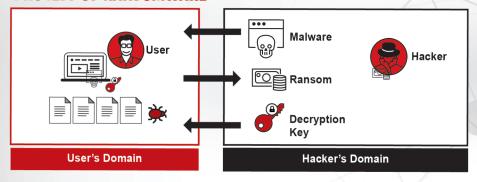
Billion USD

Source: cybersecurityventures

## **RISKS OF INFECTION**

- Destroy Backups
- Steal Credentials
- ▶ Leak Stolen Data
- ▶ Publicly expose Victims
- ▶ Threaten victim's customers

## **PROCESS OF RANSOMWARE**



# avication attack a business Every **SECONDS**

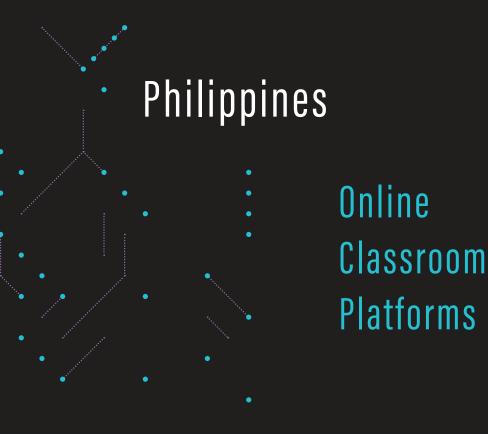
by the end of 2021

Source: cybersecurityventures

## **WAYS TO PROTECT RANSOMWARE**

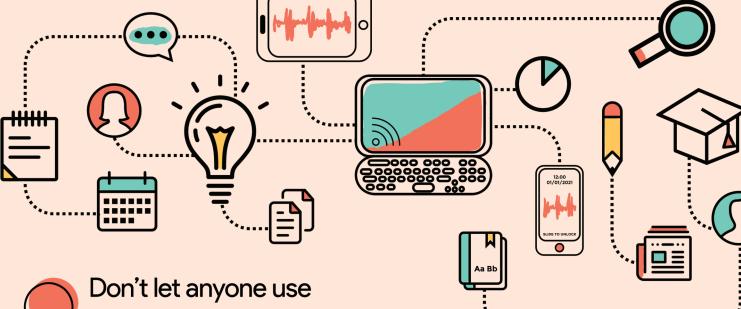
- ▶ Be aware of installing fake apps
- ▶ Back up all files
- ▶ Use a trusted and robust mobile security solution
- ▶ Keep up-to-date about the latest threats
- ▶ Install Security Patches





## Saje Use of Online Classroom Platforms

- Set your online class to "private"
- Teachers should have a class list to ensure that students in the room are accounted for
- Don't share the class link or Meeting ID number on social media or any messaging apps
- Enable password for each session



- Don't let anyone use your account for your online classes
- Teachers should appoint a co-host that could take control of the class in case he/she gets kicked out of the room
- Regularly update application
- Avoid using third party apps like video and voice recording, during class





Email Extortion Scam





# WHAT IS AN EMAIL EXTORTION SCAM?



What should you do if you receive an extortion email?

Learn how this scam works and what you should do to avoid falling victim.

## **HOW THE SCAM WORKS**



- You receive an email claiming that your device/account has been compromised
- Scammer claims to have your 'private and confidential' information
- A ransom is demanded to keep the information private, typically in a currency called Bitcoin
- 4 Scammer may use your email and password from past data breaches as 'proof' that the email is legitimate

## WHAT SHOULD YOU DO?

Do not make payment. Delete the email immediately. To prevent unauthorised access, you should:



Set strong passwords that are long and random



Enable Two-Factor Authentication (2FA) when available



Do not use personal information (e.g. NRIC) in your passwords



Perform anti-virus scans on all devices



Use different passwords for different accounts



Keep your software up-to-date



How to Use Mobile Safely



# OW TO USE

G MOBILE MIGHT BE MORE DANGEROUS THAN YOU COULD IMAGINE



PERSONAL DATA OR ORGANIZATIONS' CLASSIFICATION DATA MIGHT BE LEAKED AND RANSOMED



THE POSSIBILITY IN BEING DIGITALLY TRACKED **AND FRAUD COULD EMERGE** 



IMPORTANT DATA MIGHT BE STOLEN **AND CANNOT BE** RETRIEVED







APPLY "DOUBLE LOCK" BY USING MOBILE PASSCODE FOR MOBILE ACCESS AND USE PASSWORD FOR APPLICATION LOG IN







105 TURN ON

FIND MY 1PHONE THE APPLICATIONS THAT CAN BE LOGGED IN FROM BROWSERS TO LOCK OR RESET YOUR LOST **PHONE** 



WHEN THE



**NOTIFY THE APPLICATION** SERVICE PROVIDERS SUCH AS *E-BANKING SERVICES* FOR SUSPENSION



CHANGE PASSWORDS FOR EVERY APPLICATION IN YOUR PHONE



TO TRACK CRIMINAL ACTIVITIES AND TO KEEP THE NOTIFICATION AS **EVIDENCE IN CASE CRIMINAL ACTIVITIES ARE COMMITTED VIA** YOUR PHONE



ACCESS FIND MY DEVICE OR FIND MY IPHONE TO

LIMIT THE ACCESS AND DELETE THE IMPORTANT DATA REMOTELY



















# FREE APPS COSTLY EXPERIENCE



Remove untrusted apps which can exploit sensitive information from your smartphone



