

CYBER SECURITY

END USERS DATA PROTECTION & ISP ROLES



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OUTLINE

- OBJECTIVE
- INTRODUCTION
- WHAT IS CYBER SECURITY ?
- WHAT IS END USERS DATA ?
- CYBER SECURITY THREATS END USERS FACE DAILY
- HOW CAN END USERS PROTECT THEIR DATA?
- WHAT IS INTERNET PRIVACY?
- ISPs ROLE IN PROTECTING END USERS DATA
- TOOLS/APPS USED FOR END USERS TO PROTECT THEIR DATA
- CONCLUSION



Q & A

Objective

The objective of this presentation is to expand on Cyber Security with more emphasis on End Users Data Protection, Internet Service Providers [ISP] with their roles and responsibilities in protecting their network and End Users Data.



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Introduction

Cyber Security is the protection of internet- connected systems including hardware, software, and data from cyber attacks.

But for this webinar we will be focusing on End users Data Protection, ISP roles and responsibility with other essential information's to help you under cyber security and its chain of operation that will help keep you secure and prevent hackers from hacking you.



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What is Cyber Security

Cyber security consists of technologies, processes and measures that are designed to protect systems, networks and data from unlawful access and usage.

For this webinar we focus on key things



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- **The Pillars of Cyber Security**
- **Who is a Hacker**
- **Cyber Attack lifecycle**
- **Consequences and risk of a Cyber Attack**



Pillars of Cyber Security

Cyber Security is primarily centered around the following principles:

CONFIDENTIALITY

INTEGRITY

AVAILABILITY

Confidentiality

Information kept private and secure



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Integrity

Data not
Modified, Deleted
or added

Availability

Systems available
to whom requires
them

Definitions of the CIA Triangle



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CONFIDENTIALITY – Keeping sensitive information private. Encryption services can protect your data at rest or in transit and prevent unauthorized access to protected data.

Definitions of the CIA Triangle

Integrity – is the consistency of data, networks, and systems. This includes mitigation and proactive measures to restrict unapproved changes, while also having the ability to recover data that has been lost or compromised.



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Definitions of the CIA Triangle



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Availability – refers to authorized users that can freely access the systems, networks, and data needed to perform their daily tasks. Resolving hardware and software conflicts, along with regular maintenance is crucial to keep systems up and available.

Who is a Hacker?

A Hacker is a person who take or do things unauthorized.

A security hacker is someone who seeks to breach defenses and exploit weaknesses in a computer system or network.

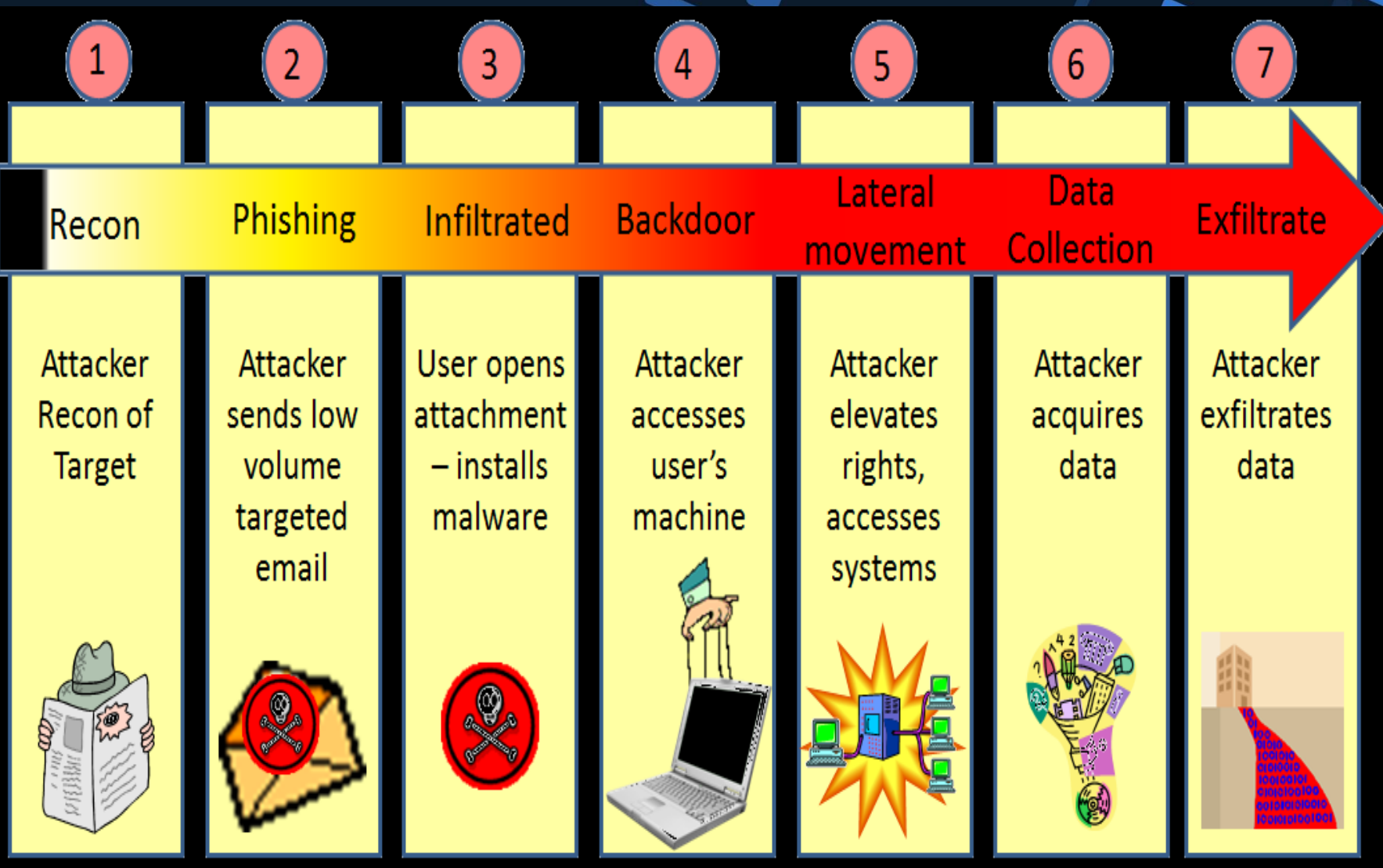
Hackers may be motivated by a multitude of reasons, such as profit, protest, information gathering, challenge, recreation, or to evaluate system weaknesses to assist in formulating defenses against attacks.



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Cyber Attack lifecycle



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What are the consequences/risk of a cyber attack?

1. Reputational damage
2. Revenue Loss / Economic sabotage
3. Threat to National Security
4. Loss of Productive Man-hours
5. Data Corruption, leakage or loss
6. Denial of service
7. System Damage



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WHAT IS END USERS DATA ?

End User Data means information collected from Users of either party's services, products, or software, including personally identifiable information and any data about a User that can be connected to personally identifiable information relating to such End User.



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EXAMPLES OF END USERS DATA ?

- i. MEDICAL RECORDS
- ii. BANK INFORMATION
- iii. CALL RECORDS
- iv. SMS RECORDS
- v. PERSONAL EMAILS
- ETC.....



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CYBER SECURITY THREATS END USERS FACE DAILY

New threats emerge daily on the internet. They are increasing in frequency and complexity and they aren't aimed solely at larger corporations. Each day internet users and small businesses fall prey to devastating cybersecurity threats.

- Phishing
- Ransomware
- Man-in-the-Middle (MitM) Attacks
- Distributed Denial-of-service (DDoS)
- Botnets
- Viruses and Worms



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HOW CAN END USERS PROTECT THEIR DATA?

- **Crucial End User Data Protection Tips**
 1. **Never say “it will not happen to me”**
 2. **Use Complex Passwords**
 3. **Never Leave devices unlocked**
 4. **Always use secure network connection**
 5. **Beware of phishing websites and use internet cautiously**
 6. **Avoid usage of pirated and cracked**
 7. **Always keep your devices protected with antivirus**
 8. **Always keep your software/apps bundle updated**
 9. **Always keep your firewall active:**
 10. **Keep your sensitive data stored away from any device in a secure storage.**



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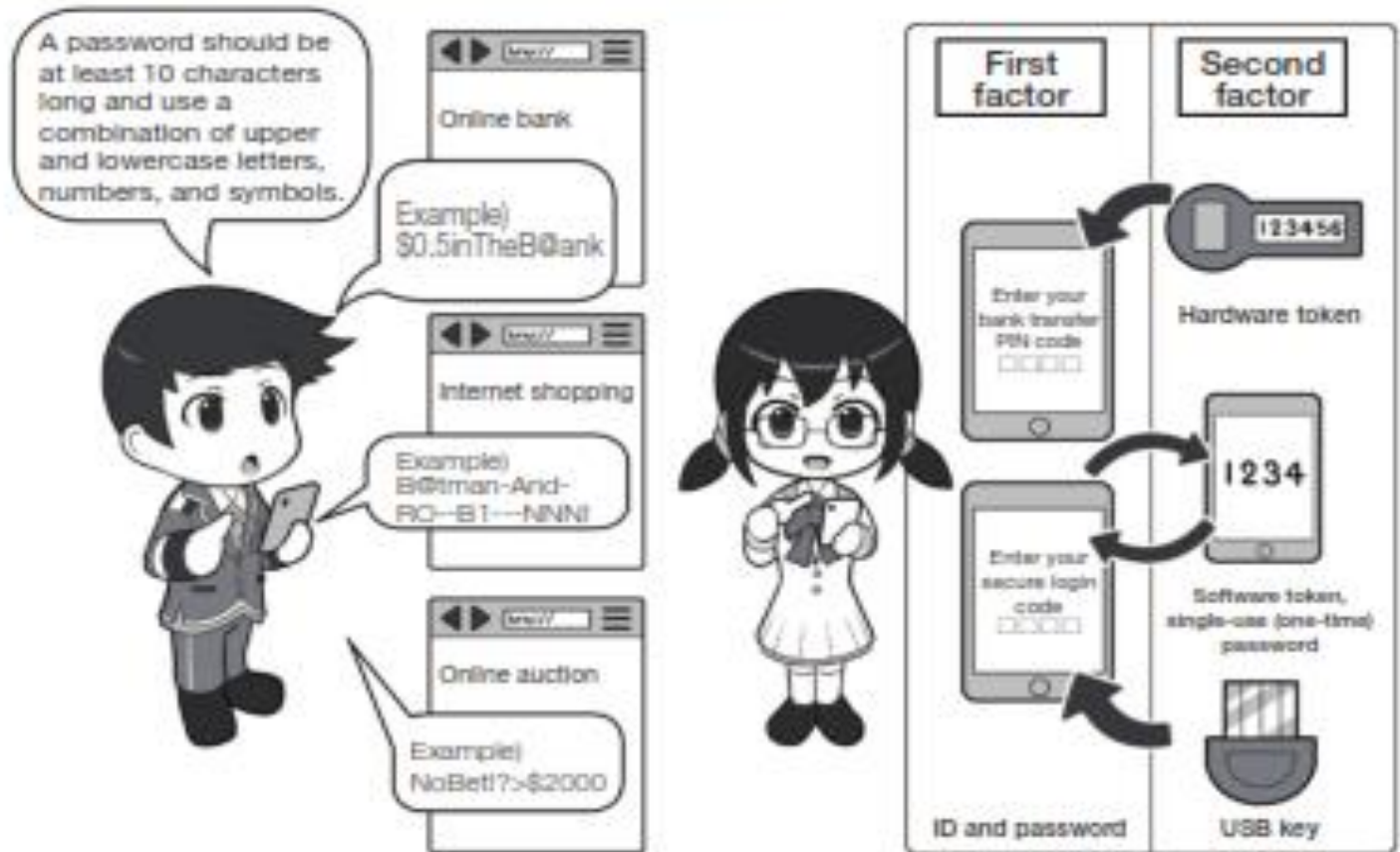


POINTS TO KEEPING SECURE

Visual Example:

Using complex passwords and multi-factor authentication to make intrusion more difficult for hackers

Maintain security with complex passwords and multi-factor authentication



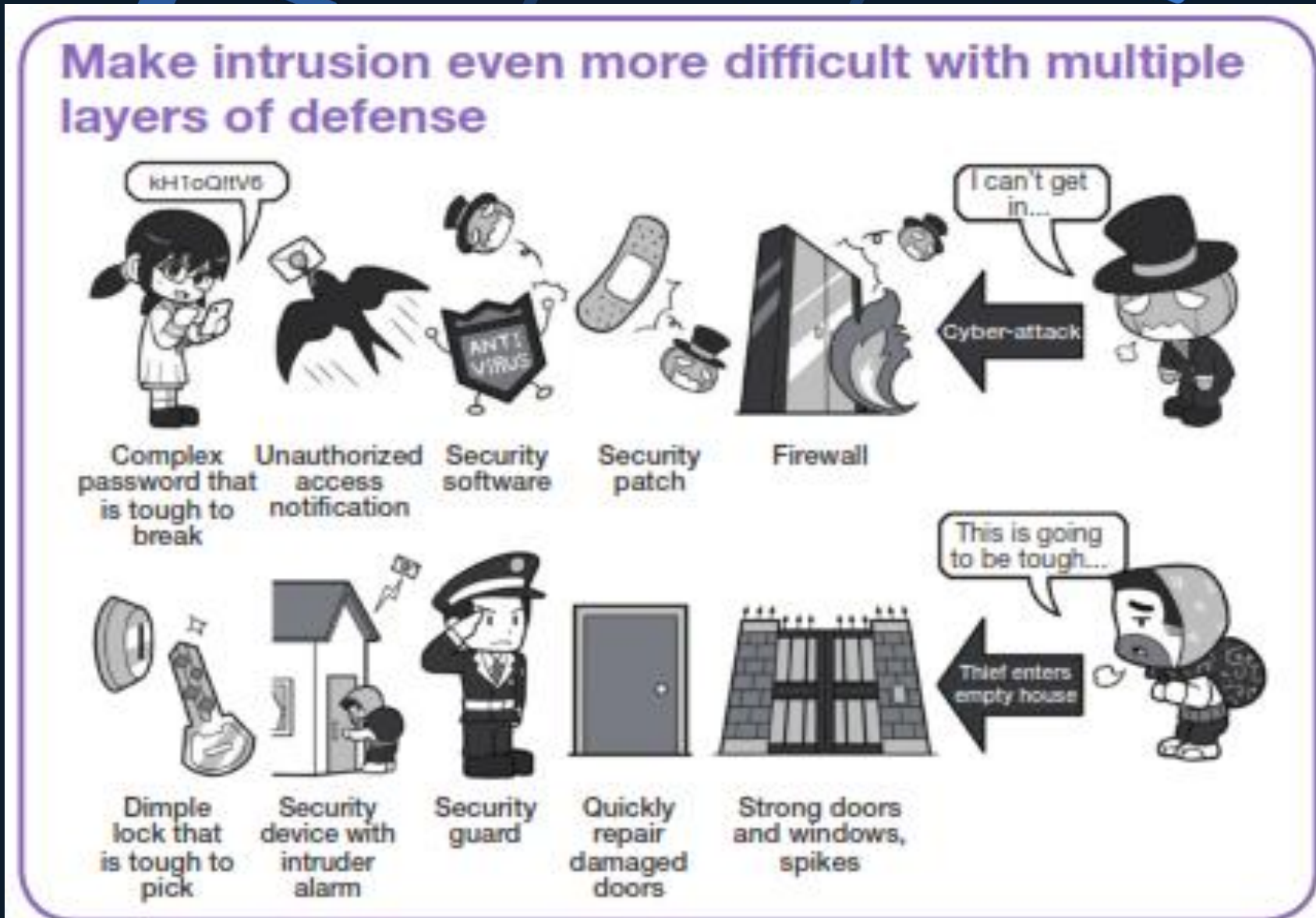
Using complex passwords that contain upper and lowercase letters, numbers, and symbols that are not shared between different web services and devices.

Introducing multi-factor authentication and using physical device keys that cannot be leaked on the Internet.

POINTS TO KEEPING SECURE

Visual Example:

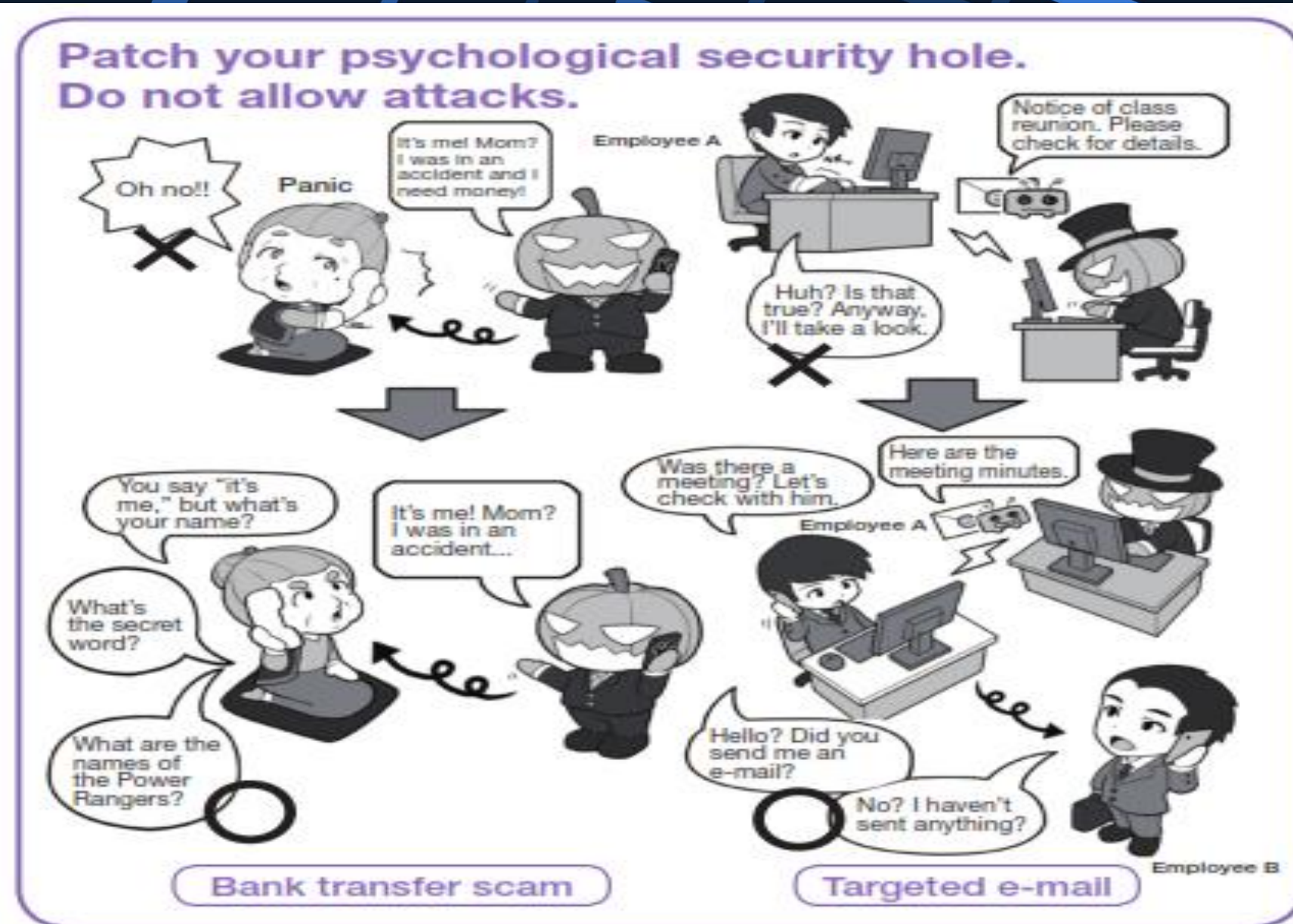
Make attacks more difficult by ensuring intrusion takes time and effort (cost)



POINTS TO KEEPING SECURE

Visual Example:

Patch your
psychological security
hole
(resistance to social
engineering)



WHAT IS INTERNET PRIVACY?

Internet privacy is the privacy and security level of personal data published via the Internet. It is a broad term that refers to a variety of factors, techniques and technologies used to protect sensitive and private data, communications, and preferences.

Internet privacy and anonymity are paramount to users, especially as e-commerce continues to gain traction. Privacy violations and threat risks are standard considerations for any website under development.

Internet privacy is also known as online privacy.



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ISPs ROLE IN PROTECTING END USERS DATA

ISPs should block IP address spoofing for their subscribers . Many ISPs are doing this. According to data gathered by the Center for Applied Internet Data Analysis (CAIDA) as much as 70% of valid IP space can't be spoofed. If that's true, many ISPs are already filtering.

However, there are many other types of attacks that ISPs could take a more active role in mitigating.

New threats emerge daily on the internet. They are increasing in frequency and complexity and they aren't aimed solely at larger corporations. Each day internet users and small businesses fall prey to devastating cybersecurity threats.



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ISPs ROLE IN PROTECTING END USERS DATA

cont.

ISPs need to stop invading end users privacy by monitoring their call in this COVID19 epidemic.

ISPs need to have more than 10 Cyber Security Specialists in their company to help protect end users from new security threats.



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ISPs need to more rebuts in filtering their network.

ISPs need to stop forwarding users CALLs and SMS on their network.

TOOLS/APPS USED FOR END USERS TO PROTECT THEIR DATA

1. ESET MOBILE SECURITY & ESET ANTIVIRUS
2. KASPERSKY MOBILE & PC ANTIVIRUS
3. McAfee MOBILE SECURITY & ANTIVIRUS
4. VIRUS TOTAL SCANNER – [virustotal.com](https://www.virustotal.com)
5. NORD VPN



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eset
NOD32
ANTIVIRUS



KASPERSKY



McAfee
SECURE™



VIRUSTOTAL



NordVPN

LIVE DEMO

- Information Gathering



- Phishing



CONCLUSION

ISPs are in the right position to make a huge dent in cybersecurity for all of us. What better place to protect businesses and citizens from third-party cyber threats than at the front door? With a hacker attack every 39 seconds, perhaps it's time for ISPs to take a more active role as threats grow faster and more sophisticated. With the ever-growing and shifting landscape of threats, perhaps ISPs will step up their game and offer more aggressive cyberattack response solutions to their customers



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Get involved.

“If you want a better security start taking precaution now and keep working on it everyday.”

 By Victor K.Jarlwood

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God Bless You



I'm a Certified White Hat Hacker

Lifecycle of a Cyber Security



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