



# Cyber Security

For Small Business

A practical guide



**Explain  
your  
idea**





# Is Cyber Security for me?



 **Mentimeter**

**2465 9665**

**What is Cyber Security?**

 **Mentimeter**

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# Cyber Crime is a business

## #1 Global Business Risk

Allianz Risk Barometer 2022 lists cyber incidents as the #1 global business risk, above business interruption and natural disasters.

Source: Allianz Risk Barometer 2022

## \$1.5 Trillion in Annual Revenue for Cybercriminals.

According to Bromium and Dataprot, Cybercriminals earn \$1.5 trillion in annual revenue with \$1 billion of that alone coming from the ransomware category. That's a ransomware attack every 11 seconds by 2022.

Source: Bromium, Inc

## 2.6X Greater Gains Compared to Largest U.S. Company

Cybercrime totals \$1.5 trillion in revenue annually. Walmart's income reached \$572 billion in 2021. In comparison to Walmart, cybercrime enjoys over 2.6 times greater gains.

Source: Arctic Wolf



## \$8.4 Trillion in Annual Damages

Measured as a country, cybercrime would be the world's third-largest economy after the U.S. and China with inflicted damages totaling \$8.4 trillion USD globally in 2022.

Source: Statista Technology Market Outlook, National Cybersecurity Organizations, FBI, IMF



# Attacker Types

- **Highly qualified gangs**
- **Common gangs**





# Common gangs - Least effort

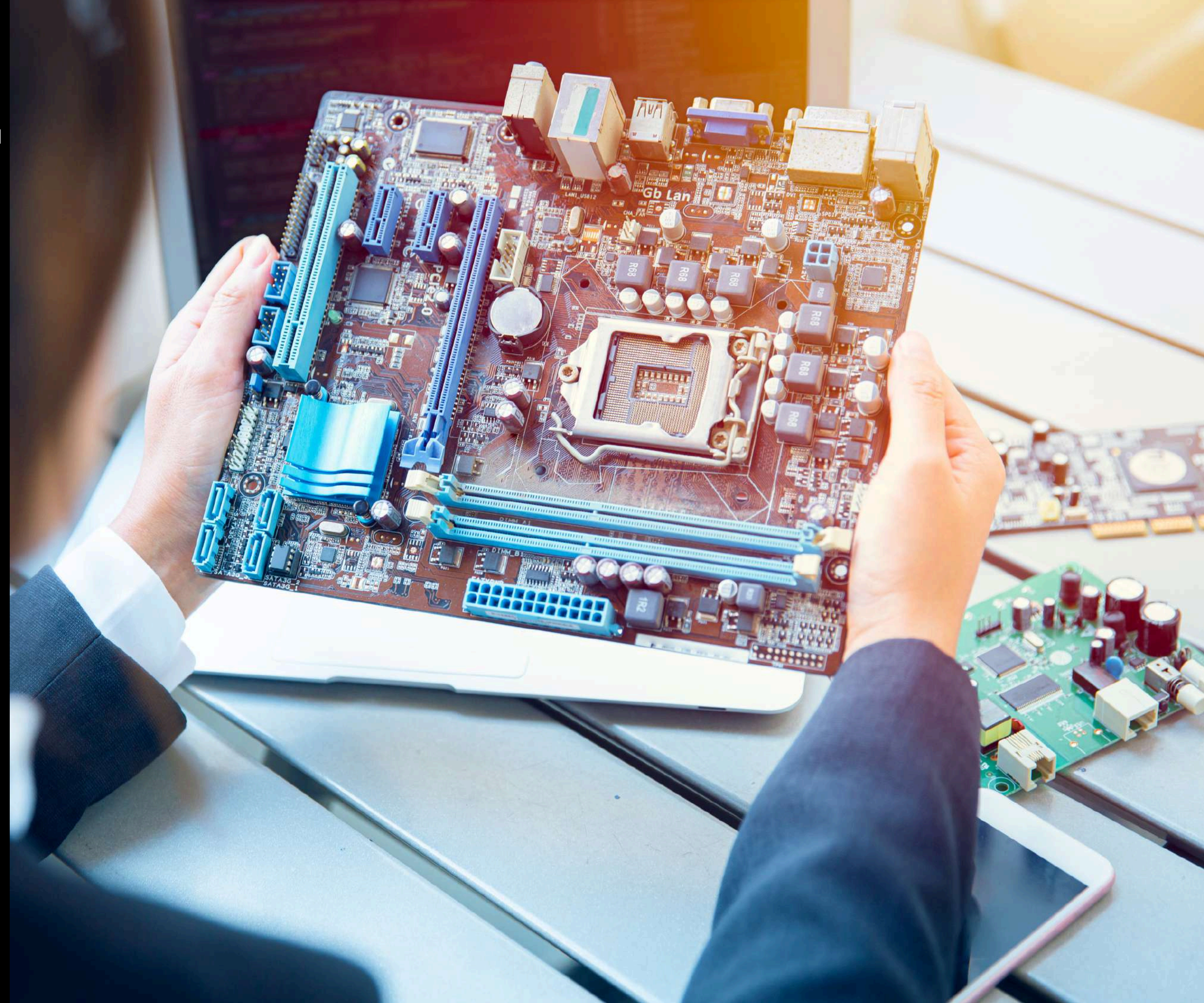




# Disclaimer

Generic advice

Not product specific



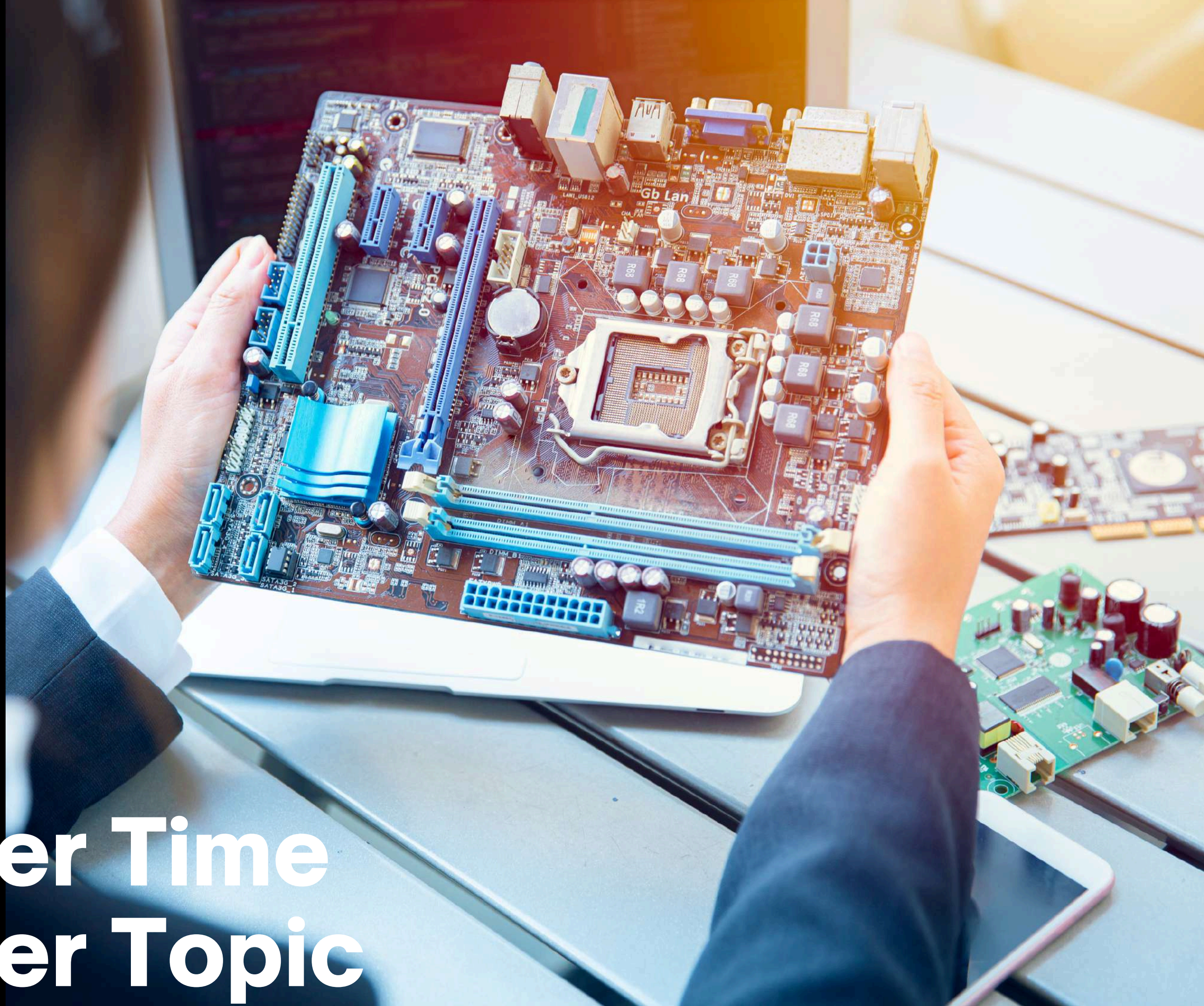


# Disclaimer

Generic advice

Not product specific

Another Time  
Another Topic





# TOP 5 Threats



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# TOP 5 Threats

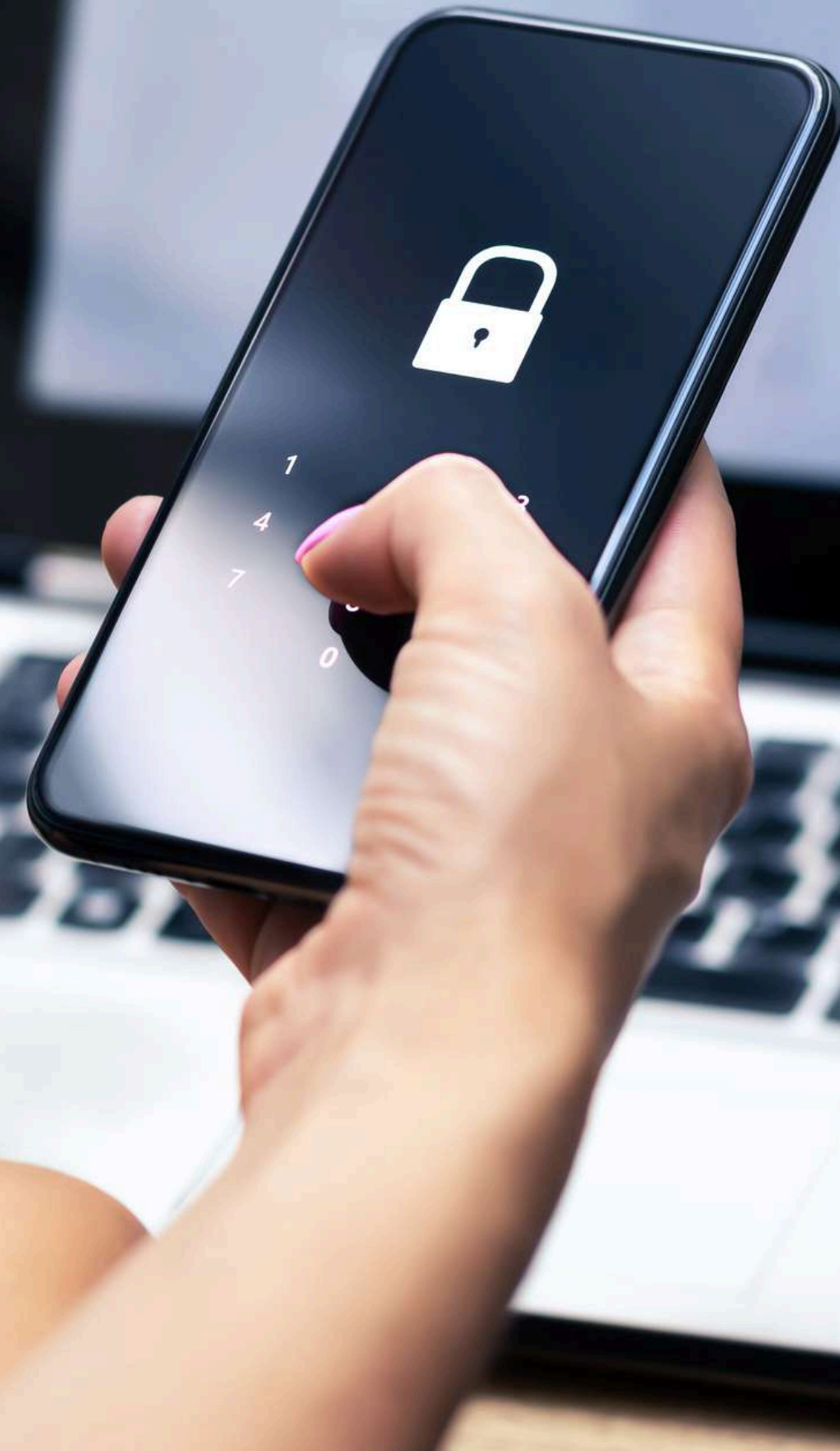
- Social Engineering
- Virus, Malware
- Man in The Middle
- Passwords
- Insider





# 1 - Social Engineering

- Phishing
- Smishing
- Vishing
- CEO fraud
- ...





# 1 - Social Engineering

20min

## Así ha hackeado LockBit al Ayuntamiento de Sevilla: "Convierten todos los ordenadores en pisapapeles en un chasquido de dedos"

MARTA GASCÓN RAQUEL HOLGADO | GRÁFICO: CARLOS G. KINDELÁN / NOTICIA / 07.09.2023 - 05:19H

El Ayuntamiento de Sevilla se ha visto afectado por un ataque de ransomware. Los servicios se han interrumpido como medida de seguridad. Se han pagado 15.000 euros de rescate.

- ¿Piden verificar tu identidad en Gmail?
- Estas son las estafas más comunes

Así funciona un 'Ransomware'. EL SISTEMA DE HACKEO PONE A PRUEBA LA SEGURIDAD DE LA ORGANIZACIÓN.

2 El mensaje traspasa todos los filtros de seguridad anti virus de la organización.

3 Algunos Ransomware pueden infectar a otros dispositivos dentro de la misma red.

TRIBUNAL SUPREMO >

## Se hacen pasar por CEO de la empresa y estafan millones: ¿cuánta responsabilidad tienen los bancos?

Una extrabajadora de la EMT Valencia, considerada responsable contable del fraude a la empresa municipal, pide al Supremo que aclare la situación de las entidades bancarias

Home > Tecnología

## Le estafan 15.000 euros mediante smishing pero el banco se niega a devolverle el dinero

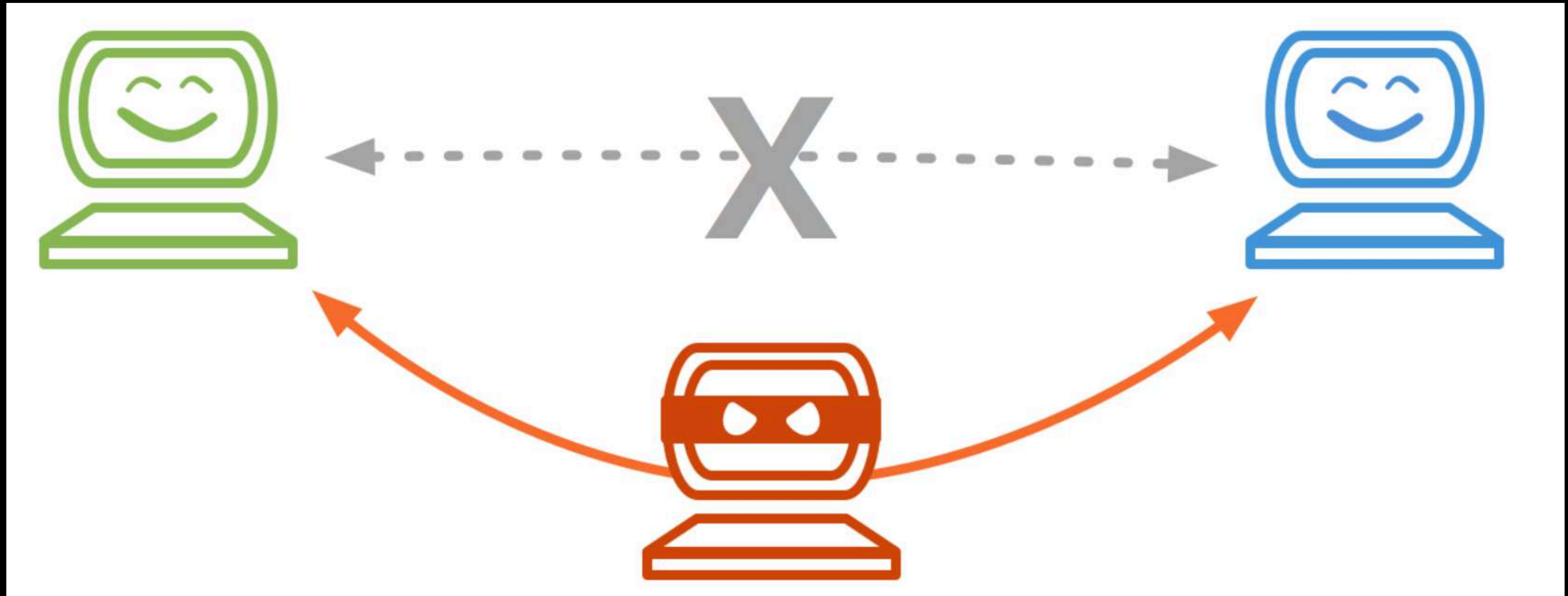


# 2 - Virus, Malware





# 3 - Man in the middle





# 4 - Password



**Password  
Security**



**Shift**

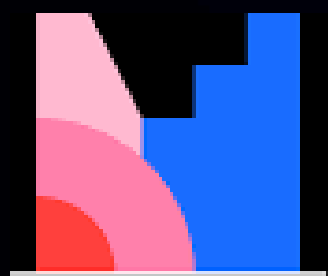


# 5 - Insider





# Measures



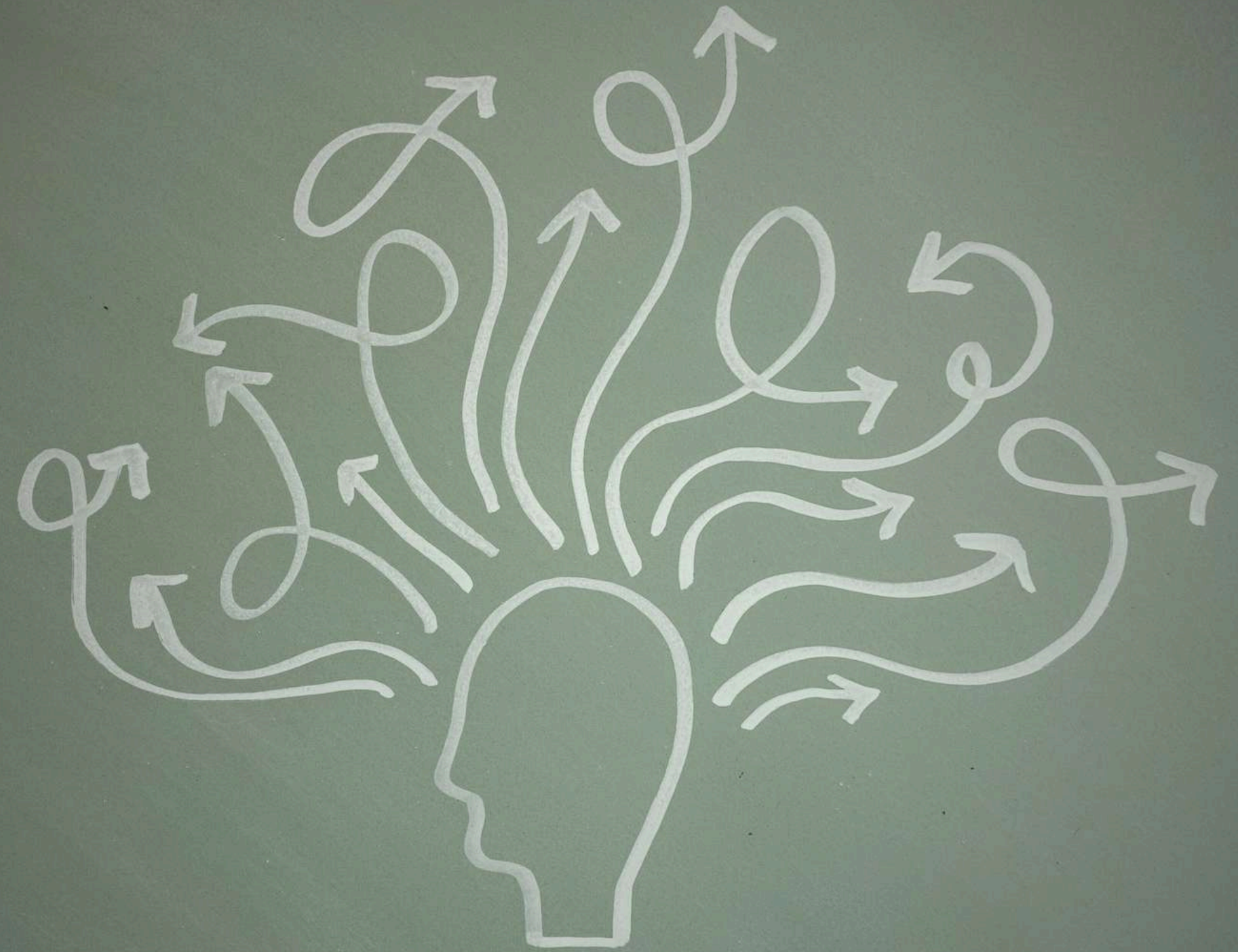
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# 0 - Awareness





# 1 - Social Engineering

## Identify:

- Urgency
- Spelling
- Domain changes
- Suspicious attachments
- 2 good 2 B true
- Asking sensitive information





# 1 - Social Engineering

**Never:**

- Click on that link
- Open the attached file



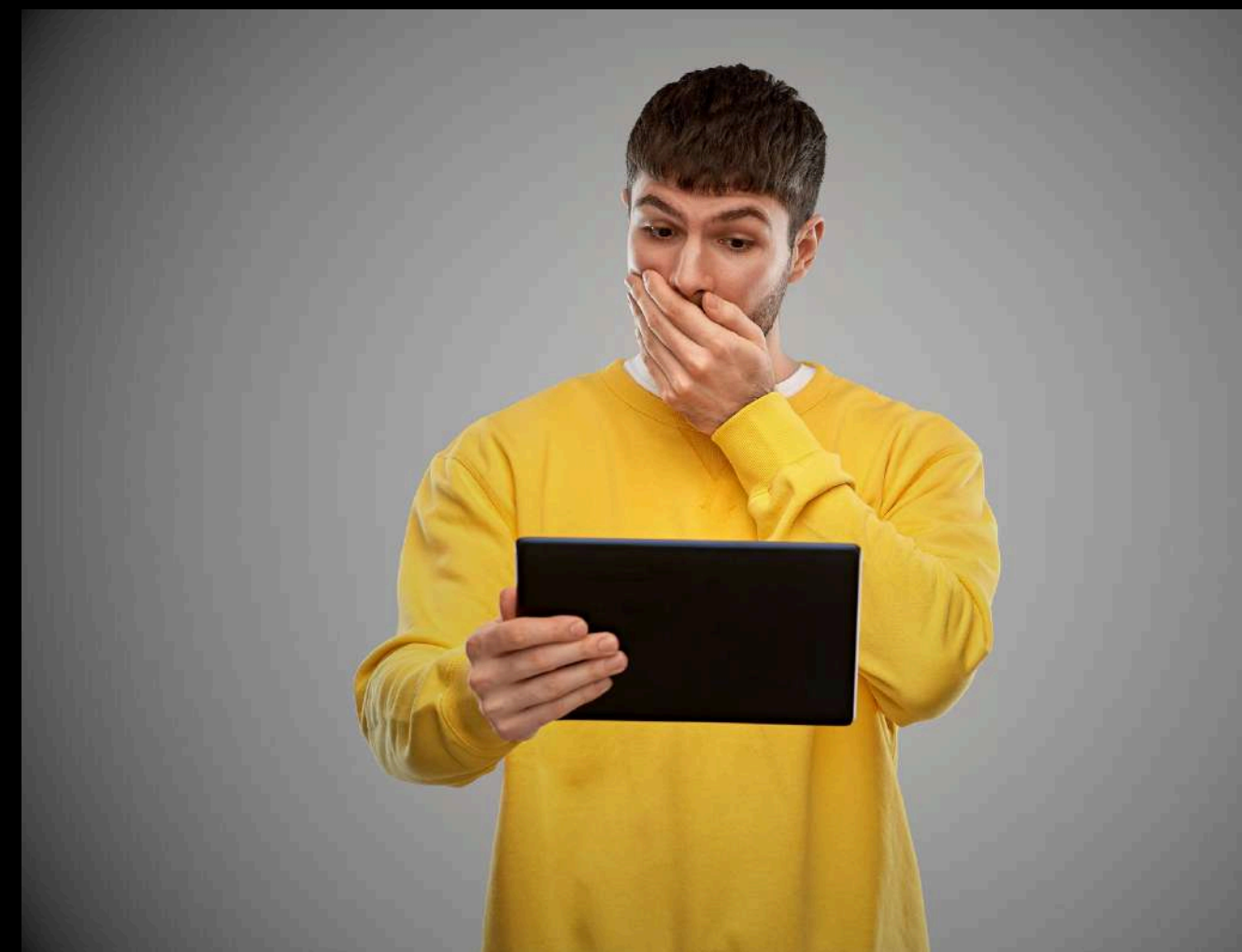


# 1 - Social Engineering

**Never:**

- Click on that link
- Open the attached file

**I fucked up!**





# 1 - Social Engineering



BASQUE CYBERSECURITY AGENCY



Doako telefono zenbakia  
900 104 891

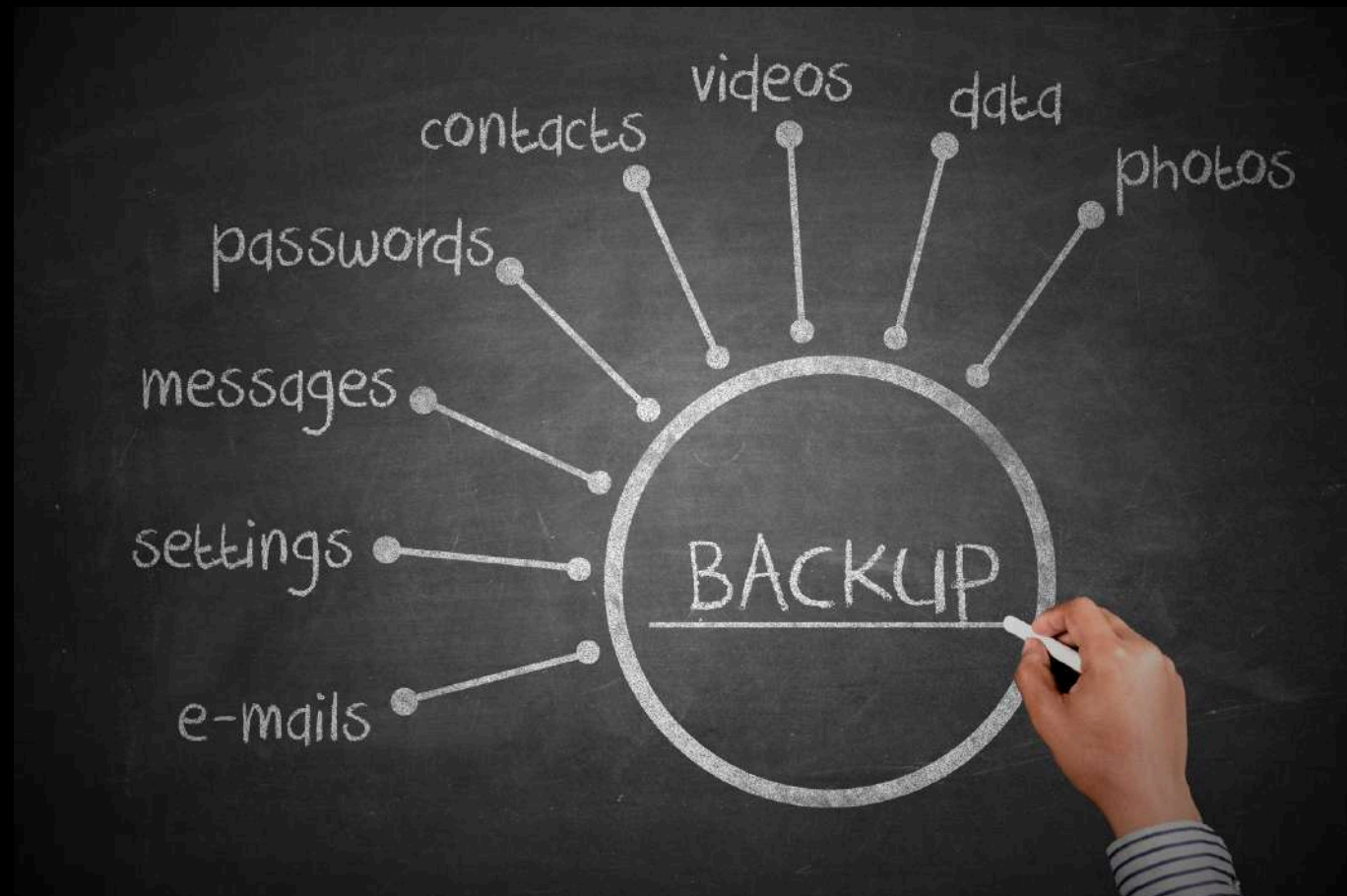


Posta elektronikoa  
[incidencias@cyberzaintza.eus](mailto:incidencias@cyberzaintza.eus)





# 1 - Social Engineering



3, 2, 1





# 1 - Social Engineering

The server has infected by ransomware

Where is backup?

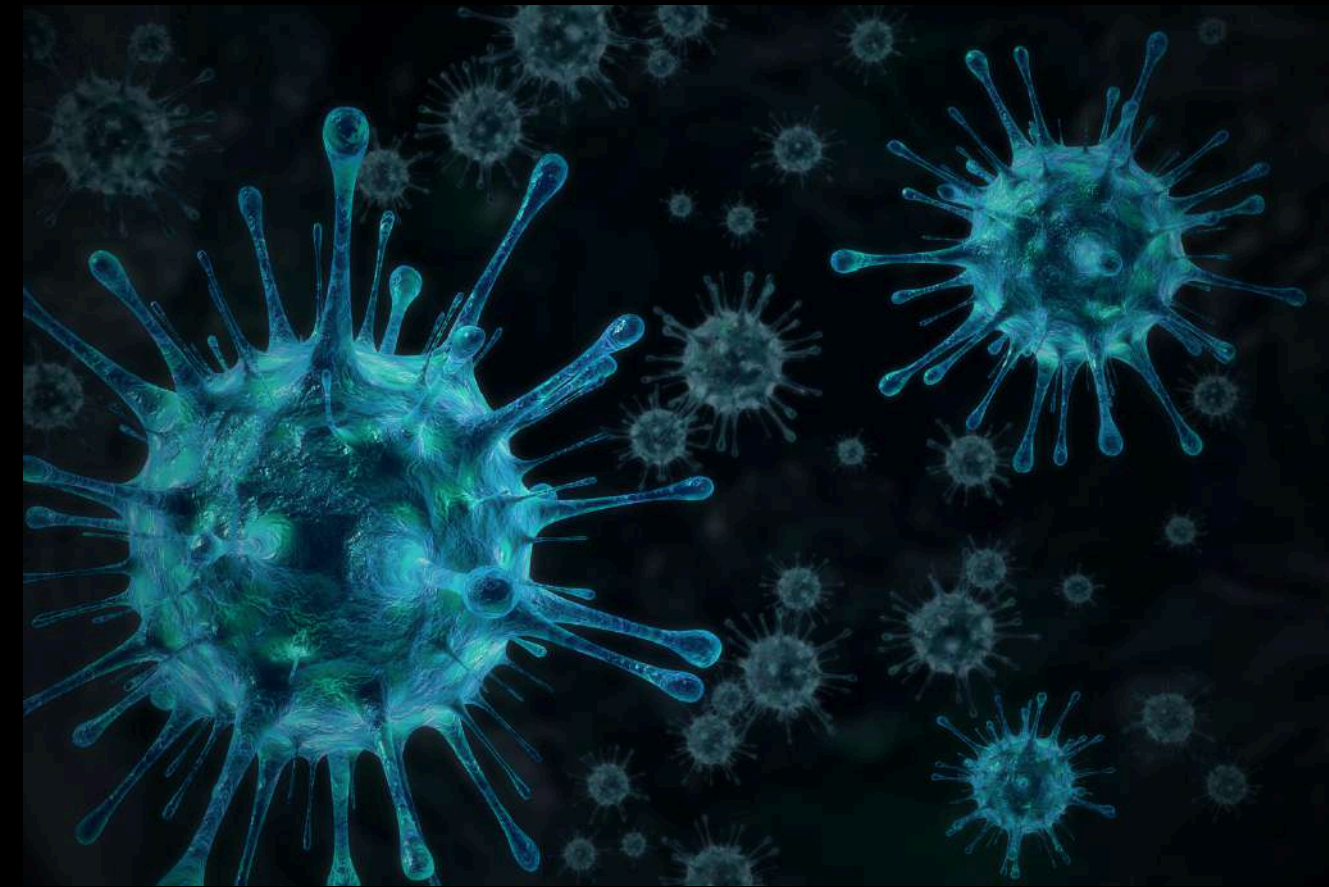
On the server





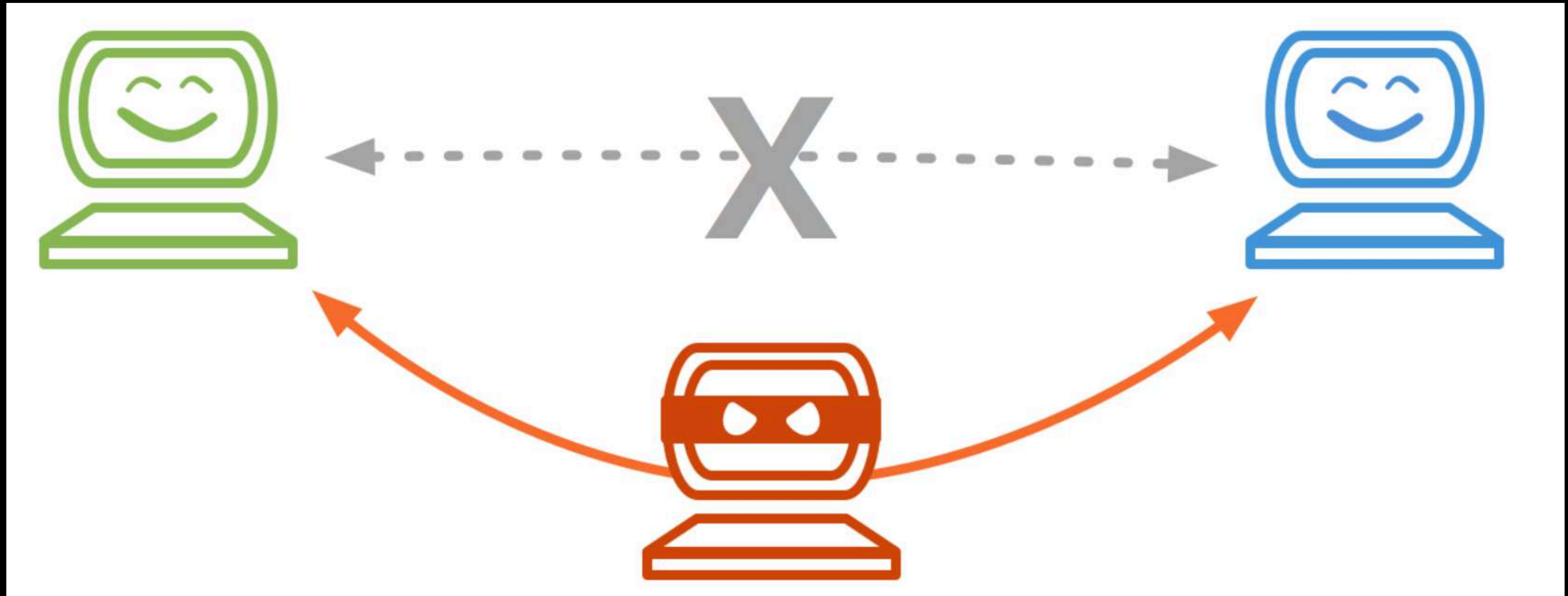
## 2 - Virus, Malware

- Updates
- AV
- EDR (Sysmon at least)





# 3 - Man in the middle









# 3 - Man in the middle





# 3 - Man in the middle. Our WIFI

## Encryption algorithms

- WPA2 
- WPA 
- WEP 
- Ninguna 



# 3 - Man in the middle. Other WIFI

- Don't use
- Use with VPN
- Use with no sensible info
- Use at your own peril





# 4 - Password

Best practices:





# 4 - Password

## Best practices:

- Don't reveal
- Don't repeat
- Upper & lower letters, numbers & special chars
- At least 8 length
- Change periodically





# 4 - Password

S





# 4 - Password

## Best practices:

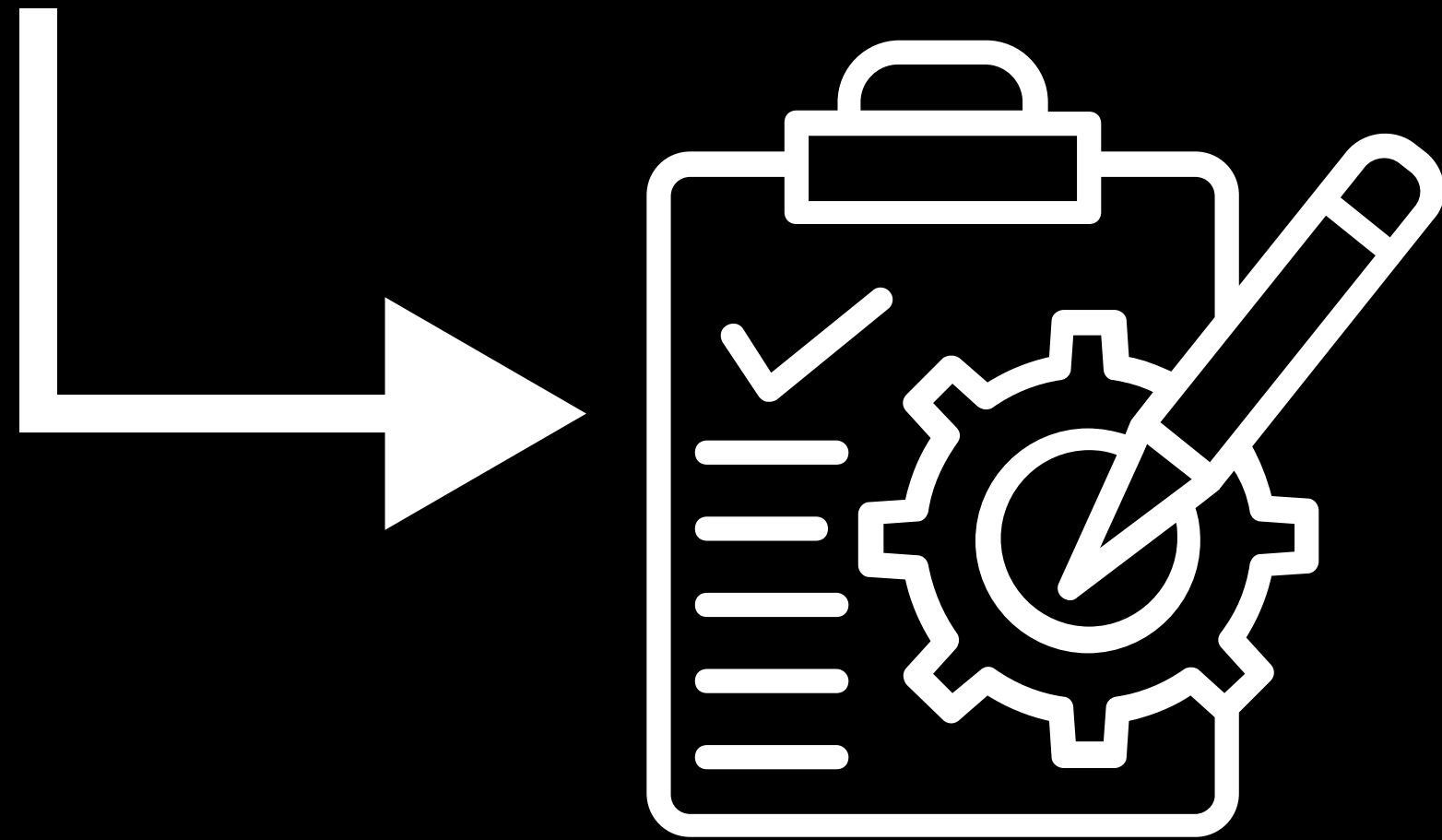
- Use Password Manager
  - LastPass: <https://lastpass.com/>
  - KeePass: <https://keepass.info/>
  - Keeper: <https://keepersecurity.com/>
  - Password Safe: <https://pwsafe.org/>
- 2FA





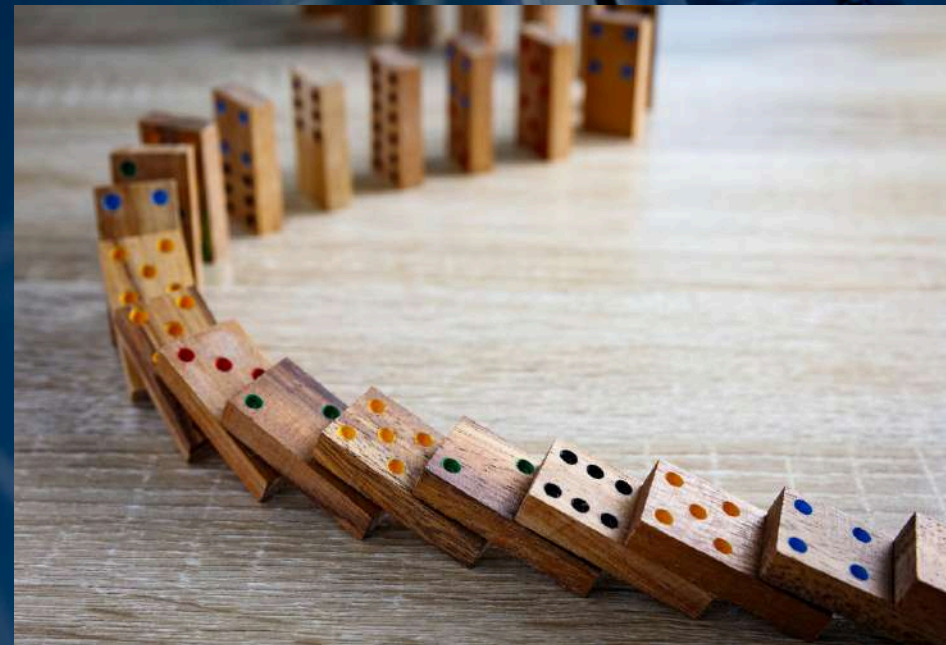
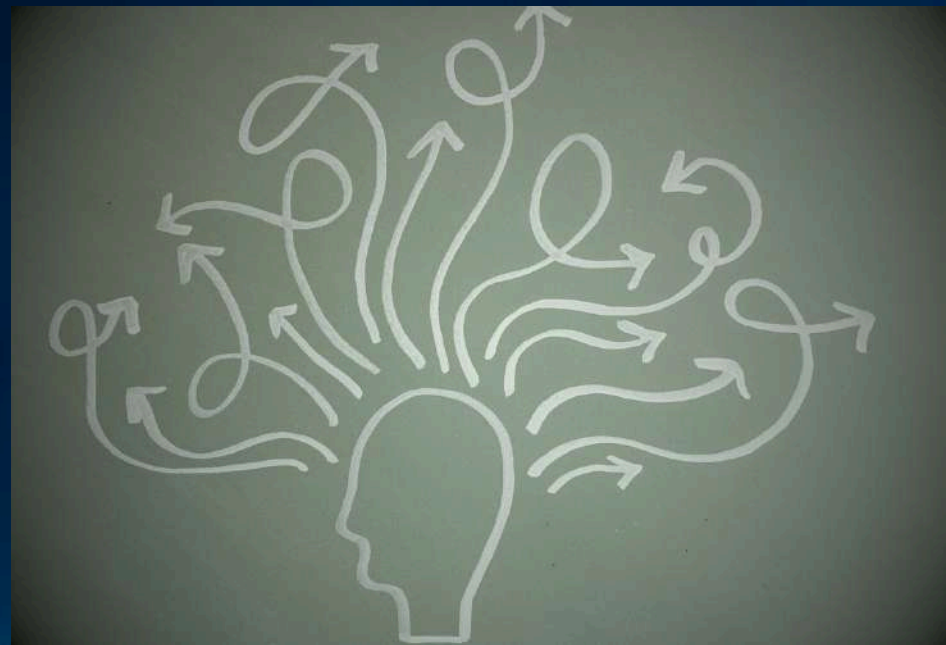
# 5 - Insider

Who can do what?





# And now what?







¿QUESTIONS?



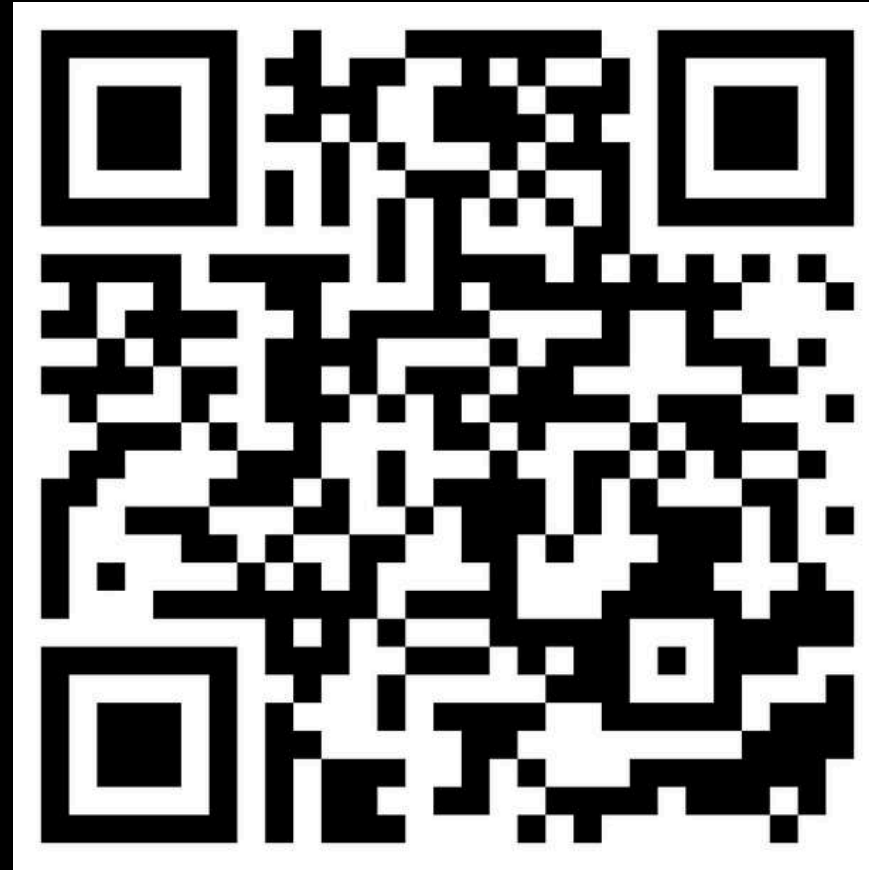


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Ibai Peña

**Tknika**

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