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# Cybersecurity\*

\* From "not so consultant" POV

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### **Profile**



#### **Background:**

- Bachelor's degree in Computer Science, Information System, Ten Nopember Institute of Technology (ITS). Graduate in 2021
- Associate IT Risk Advisory Deloitte Konsultan Indonesia (2021 2024)
- ➤ Senior Technology Consultant Cybersecurity at EY Indonesia with a focus on cybersecurity GRC
- Kemal has deep experience in IT Governance, Risk and Compliance (GRC) before joining the EY Cyber Technology Consultant team

#### Skills:

- Cybersecurity
- ► Information Security
- ► IT Audit
- ► IT Governance, Risk and Compliance (GRC)

### Relevant experiences and clients:

- Perform IT Audit for several major Indonesia's company in financial service, oil and gas, mining, manufacturing, and retail industries.
- Perform application control review as part of financial audit for several major Indonesia's financial services and telecommunications company.
- Conducted IT security governance upgrade projects for several state-owned companies engaged in energy and investment
- Perform Internal Control Over Financial Reporting (ICFR) implementation project regarding application control in one of the biggest oil company in Indonesia.
- ▶ Perform Internal Control Over Financial Reporting (ICFR) implementation project regarding application control in state own company
- ► Act as consultant for internal auditor regarding SOX implementation in one of the biggest bank in Indonesia.

# Opening....

Do you know, how much cyber attack that targeting Indonesia in 2023 based on data that has been released by BSSN (Badan Siber dan Sandi Negara)??

## 403 Million

That's why we need to tightened up our **Cybersecurity** capabilities...

Wait, what is...

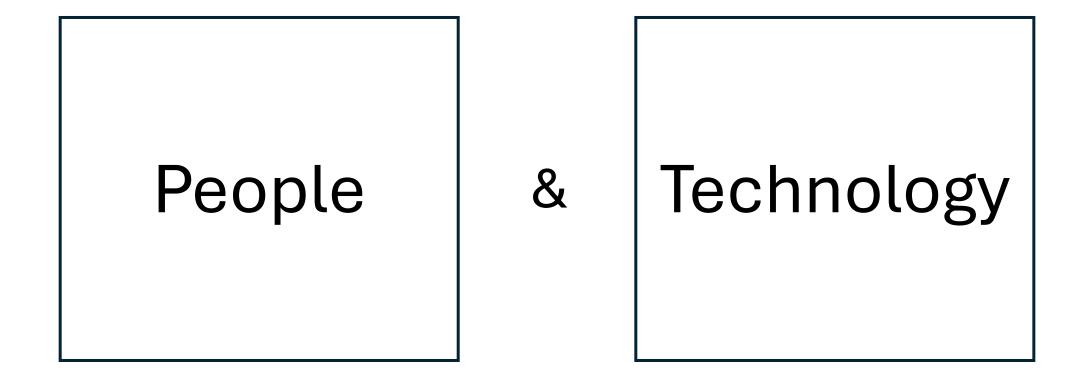
# Cybersecurity?

Cybersecurity refers to the practice of protecting systems, networks, and programs from digital attacks.

Cybersecurity measures are essential for protecting data, maintaining privacy, and ensuring the reliability and safety of digital systems.

Source: EYQ Glossary

And what is the core of Cybersecurity???



These two things must go hand in hand and cannot walk alone, why?? Pay attention to next slide

# Example of Digital Attack (Cyber Attack)

- Phising
- Man in the Middle
- Malware
- Ransomware
- Cross Site Scripting
- DoS and DDoS attack
- SQL Injection

- Brute Force
- Social Engineering
- Credential Stuffing
- Insider Threat

Okay, now how do we know that the security of a system in a company or organization is reliable??

## First, Attack

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# Secondly, Audit

We will assess all the process related to IT environment to ensure the **risk has** been addressed by management (**people**) and the daily operations are conducted based on applicable standard and procedure.

Ok, now we talk about how company protect themselves from cyber attack?

### Technical Measures

- 1. Firewall and Intrusion Detection System (IDS)
- 2. Encryption
- 3. Patch Management
- 4. Anti Virus
- 5. Multi Factor Authentication (MFA)
- 6. Network Segmentation
- 7. Backup and Recovery

### Non - Technical Measures

- 1. Security Policy and Procedures
- 2. Employee Training and Awareness
- 3. Incident Response Plan
- 4. Vendor and Third-Party Risk Management
- 5. Regular Audit
- 6. Compliance with Regulations

## QUIZ!!

Is that okay, if one of the measurement to prevent the cyber attack is not implemented by related company or organization??

That's it, any question?