

#### Connect | Educate | Inspire | Secure

#### Quo Vadis, CyberSecurity?

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CISSP, rest of alphabet soup omitted

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 $(ISC)^2$  = International Information Systems Security Certification Consortium, established in 1989

Non-profit consortium of information security industry leaders

Supports security professionals throughout their careers

Global Standard for information security: (ISC)<sup>2</sup> CBK<sup>®</sup>

Over 300,000 members, associates, candidates; over 170 countries

300 members in Greece, established in 2015





# Ahoy Captain, Challenges ahead!

May you live in interesting times\*

\*Chinese curse





## Big Challenges (some of them...)



#### 2. Processes

Risk; not just a fun board game anymore

#### 3. Technology

-Cloud: Welcome to







# Challenge #1 People





### People, Part 1/3

- Attack surface ↑ meanwhile:
  - We became more vulnerable to social engineering
  - 82% of breaches took advantage of the human factor

Humans: the chain link that will become stronger





Workforce gap of 3.4 million CyberSecurity professionals

• (ISC)<sup>2</sup> migration pathway: <u>CC - Certified in CyberSecurity.</u> free until Sep. 2023 or until coupon stock runs out





### People, Part 3/3

- More professionals; is it better?
  - Not quite; we need more diversity!
  - Diverse groups <u>mitigate groupthink</u>, but...
  - ...have less confidence wrt their decisions achieving the objective
- Managers beware!
  - Consider reduced confidence levels of diverse groups
  - Discuss ways to harness diverse groups' benefits





# Challenge #2 Risk





#### Risk, the issues

- » "Creative" Risk Management; common practice?
  - Unclear ways to estimate asset value, impact
  - Deliberate underestimation

- » Case Study: Cyber Risks in Canadian Banking Sector
  - "Known unknowns"; caution in relying on past data to predict future
  - Requires shift to resilience-centricity, continuous adaptation





#### Risk: regulating it

- "...security risk assessments of specific critical ICT ...supply chains" (NIS 2)
- ICT Third-Party Risk Management, DORA
- Guidance on Third-Party Relationships, <u>US Federal Reserve System</u>
- Outsourcing and third-party risk management, <u>Bank of England</u>





- Cyber-aware decision makers at the top
  - Call for Cyber-aware BoD members: <u>Consulting companies</u> and the <u>SEC!</u>
    - Minister for Cyber Security! (<u>Australia</u>)

- Is Cyber Resilience integrated into enterprise risk\*?
  - Business executives: 92%
  - InfoSec-focused leaders: 55%
  - \*Global Cybersecurity Outlook, World Economic Forum 2022





## Risk: harmonising it

- Interoperable Risk Management Framework (ENISA)
  - Unified risk assessment scale; results' comparison
  - Baseline security controls
  - Guidelines for evaluating and comparing risk appetites
- Using BIA to guide Risk Prioritisation/Response (NIST)
  - Identify assets enabling mission objectives
  - Leaders deciding on risk appetite/tolerance
  - System owners applying BIA to develop asset protection requirements
  - BIA becoming an input to Enterprise Risk Management





# Challenge #3 Cloud





#### Cloud: who consumes whom?

#### Businesses consume a lot of Cloud

Cloud spending surpasses on-premise since 2020

or

#### Cloud consumes a lot of businesses?

Predictable OpEx costs?

Cloud impact on profit margins?



#### Biggest threat in Cloud



62%

Misconfiguration of the cloud platform/wrong setup



54%

Insecure interfaces/APIs



51%

Exfiltration of sensitive data



Unauthorized access



Hijacking of accounts, services, or traffic



External sharing of data



Foreign state-sponsored cyber attacks

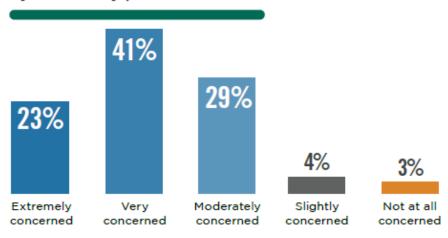


Source: Cloud Security Report 2022, (ISC)<sup>2</sup>

#### Cloud's missing ingredient



of organizations are moderately to extremely concerned about the shortage of qualified cybersecurity professionals





Source: Cloud Security Report 2022, (ISC)<sup>2</sup>



#### Where to?

- Many emerging cyber battlefields
  - supply chain, ransomware, cloud, regulations, professionals' gap, etc...
- Starting point? Security Culture; the road to maturity...
  - Culture eats strategy for breakfast
  - Security awareness on all levels
  - Security pros: hone communication skills, adapt per audience
- Security maturity; where does it lead?
  - <u>66% of C-suite</u> view cybersecurity as a revenue-enabler
  - Only 34% of C-suite view cybersecurity as a cost-center



# Thank you!

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