

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)² CBK®

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...)

1. People

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





People, Part 2/3

Workforce gap of 3.4 million CyberSecurity professionals

• (ISC)² 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 <u>less confidence wrt their decisions</u> 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" (NIS2)
- 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>



Risk: directing it

- 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

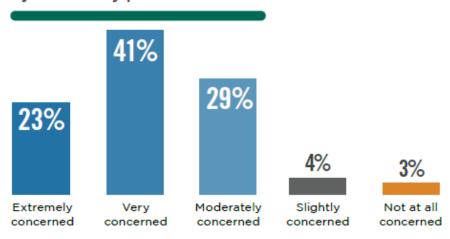


Source: Cloud Security Report 2022, (ISC)²

Cloud's missing ingredient



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





Source: Cloud Security Report 2022, (ISC)²



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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