

What about Cyber Criminals?

How might they use generative AI to up their game?

- 1. What are potential scenarios where generative AI poses significant cybersecurity risks?
- 2. What are the implications for traditional awareness and training drives?
- 3. How should organisations respond?



Scenario 1

- A hacker uses ChatGPT to generate a personalized spear phishing message
 - trained using your company's marketing material
 - plus phishing messages that were successful in the past

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Scenario 2

- An AI bot calls an accounts-payable employee, in a (deep fake) voice that sounds like the boss
- After exchanging some pleasantries, the "boss" asks the employee to transfer thousands of dollars to an account to "pay an invoice."

Scenario 3

- Hackers use AI to realistically "poison" the information in a system, creating a valuable stock portfolio
- they can cash out before the deceit is discovered

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What do these teach us?

- Up to now, most attacks used relatively unsophisticated high-volume approaches
 - Scattergun approach
 - Hoping that sheer volume will catch some people

Zombies ...

millions of persistent but brainless threats that succeed only when one or two happen upon a weak spot in the defensive barrier



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Sometimes ...

- most sophisticated threats
- lower-volume attacks that require actual human involvement
 - E.g., Stuxnet





What does this mean for cybersecurity?

• In particular, what does this mean for the humans in the socio-technical system?

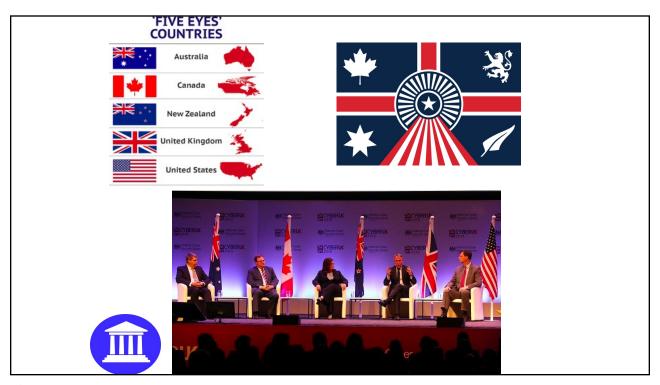
Moving from **Human as Problem** to **Human as Solution** in Cyber Security



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What's the Problem in Cyber Security?





Top 5 Cybersecurity Companies (eSecurity Planet)

- Cisco
- Symantec
- Palo Alto Networks
- Check Point
- Microsoft



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