



The strength of the chain or: End-to-End Cybersecurity in Ryanair

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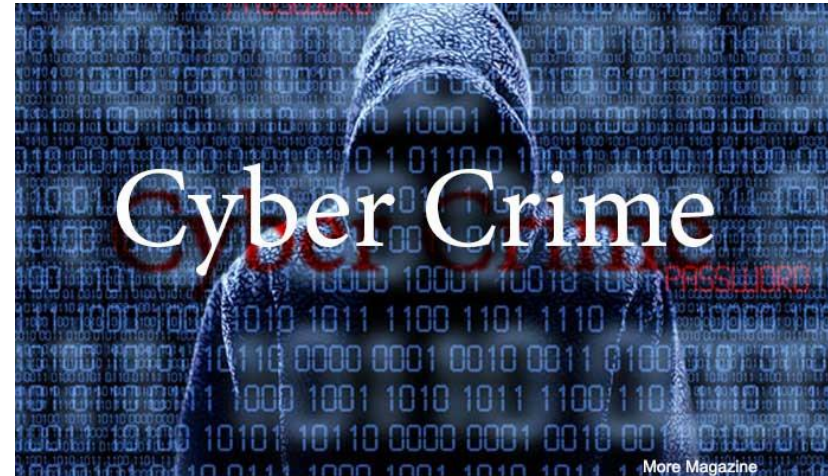


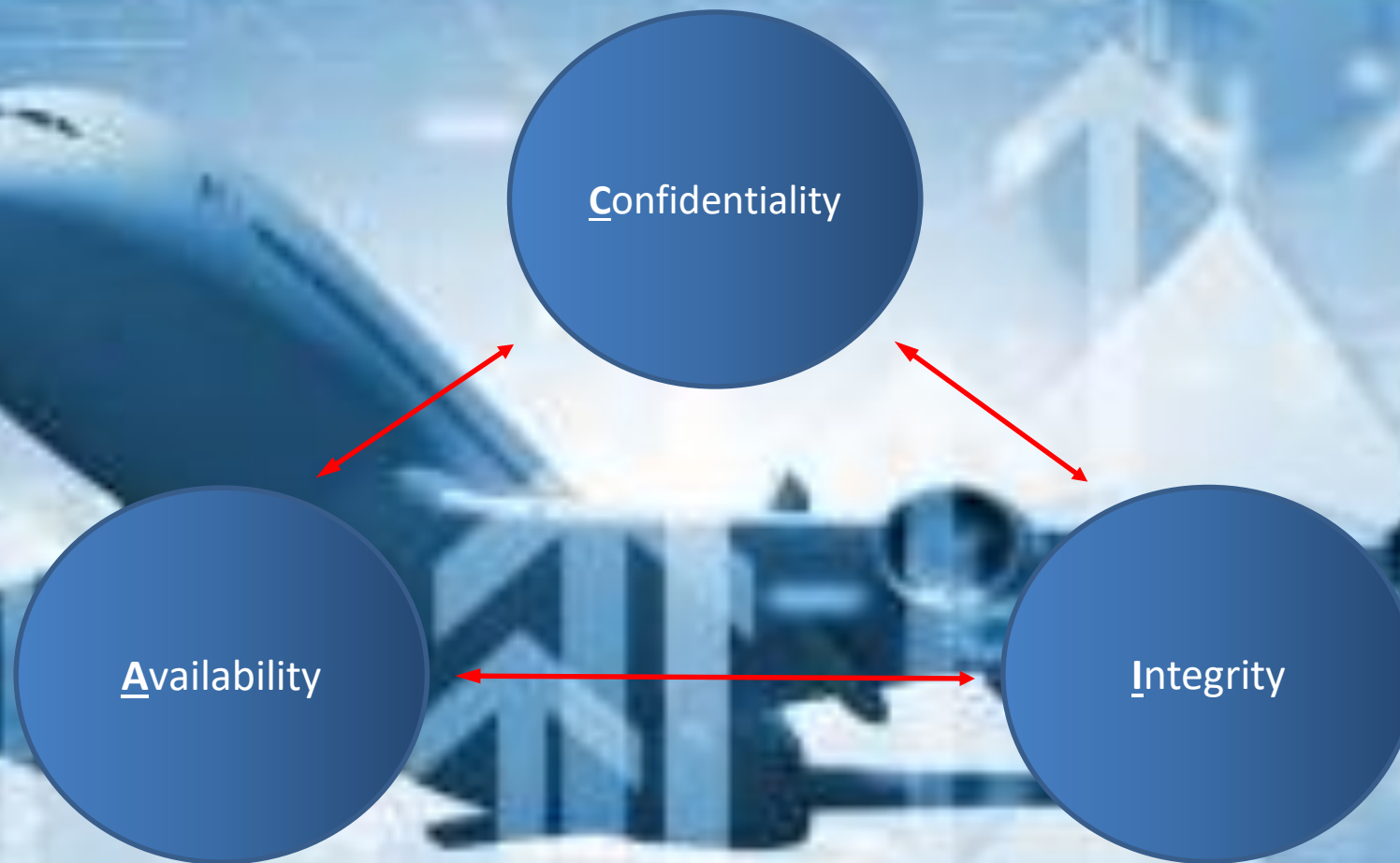
- ➔ Lowest fare/lowest cost carrier – gap widens
- ➔ No. 1, Traffic – FY18 129m (+8%)
- ➔ No. 1, Cover – 87 Bases/208 apts/430 a/c
- ➔ No. 1, Service – No. 1 on-time
 - “Always Getting Better” Prog
- ➔ 240 a/c order = grow to 200m p.a. by FY24
- ➔ 1 billion pax. flown – July 17



Security – Old Ryanair Security Model



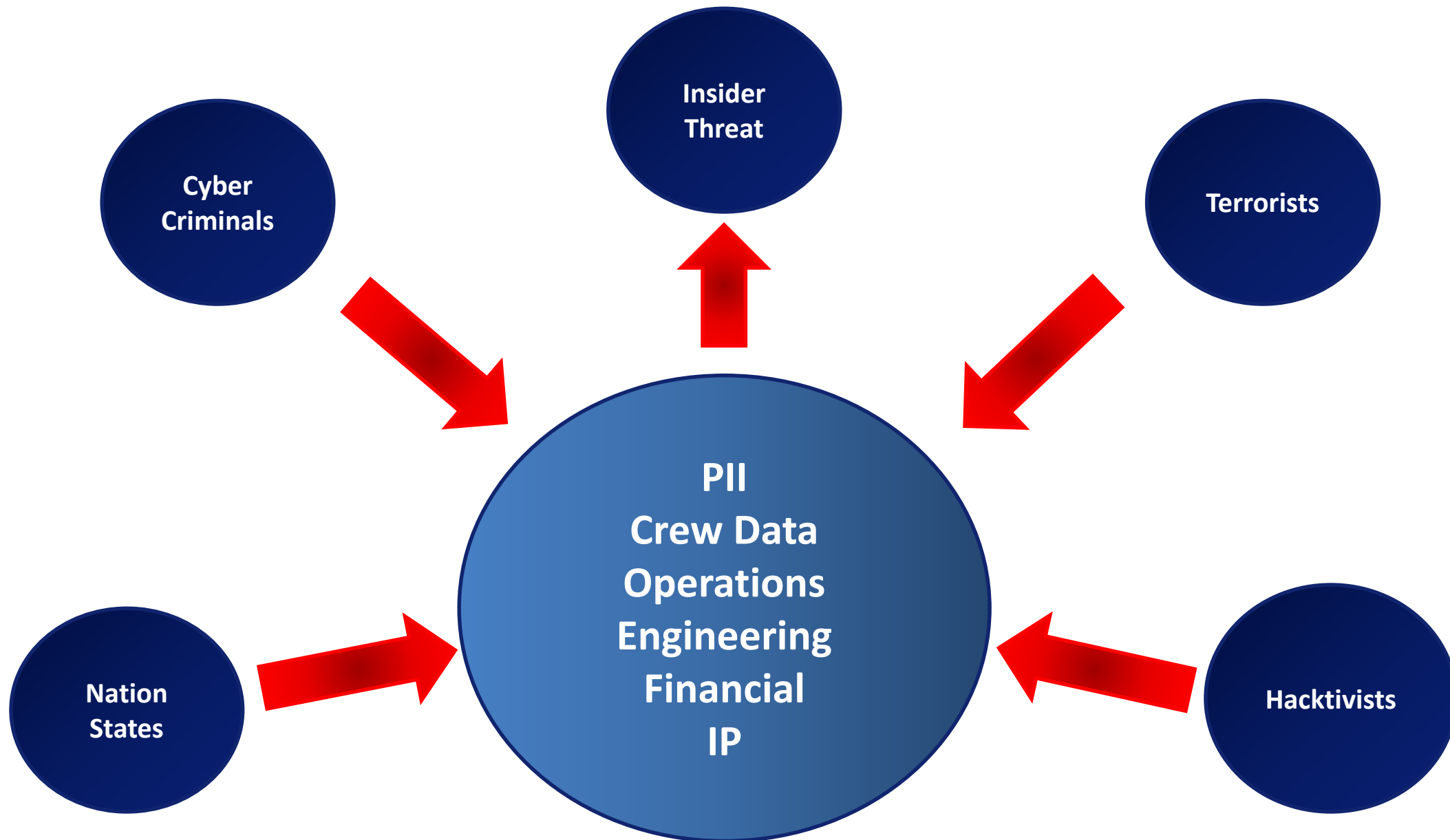




A person wearing a dark hoodie is shown from the chest up, facing slightly to the right. The background is a dark, textured surface covered with various digital elements, including binary code (0s and 1s) and snippets of code in different colors (yellow, green, white). The overall aesthetic is cyberpunk or digital-themed.

WHO?

- Cyber Criminals
- Terrorists
- Hacktivists
- Nation States



- Denial of Service
- Disruption or damage to Critical Systems
- Data corruption
- Jamming or disruption of System data exchanges

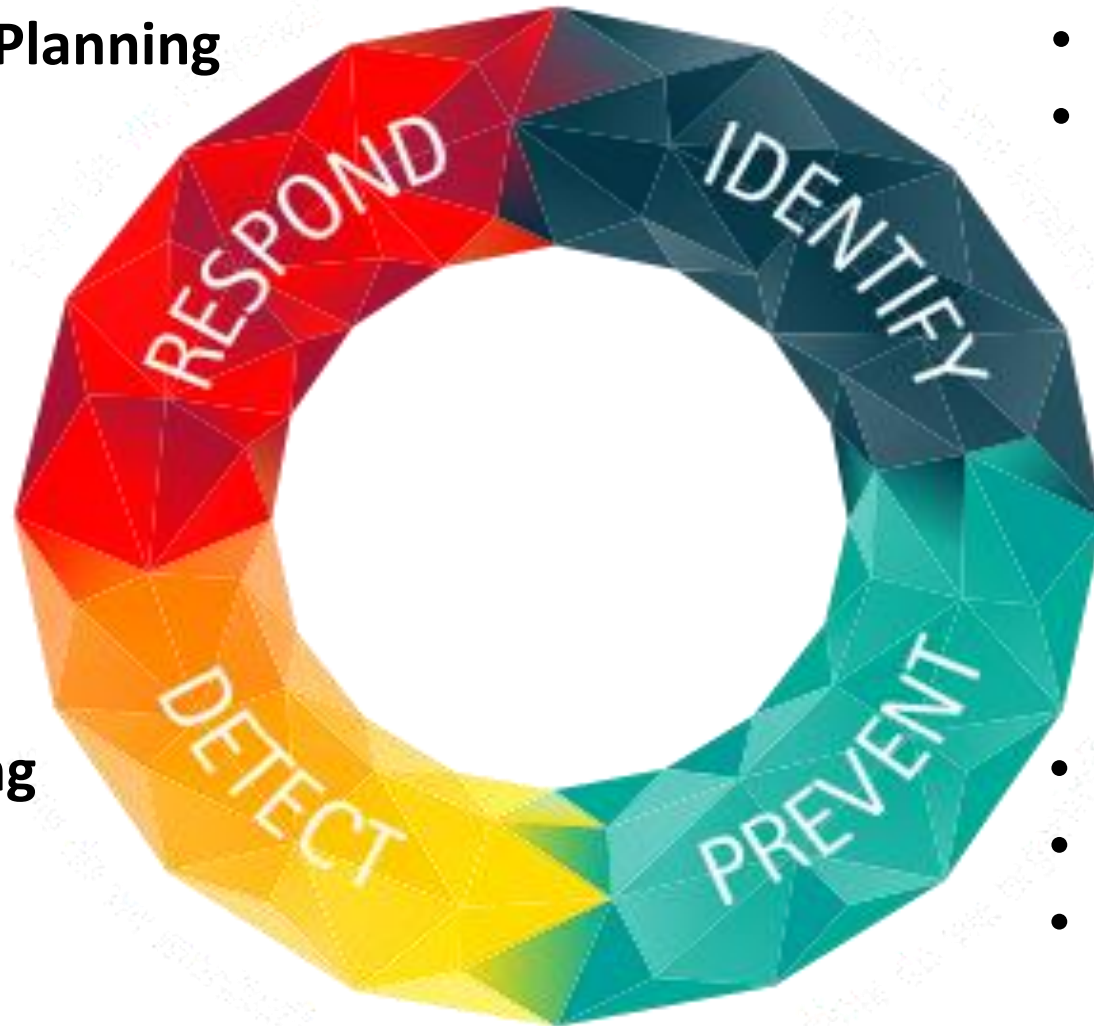




Cyber Security Resilience

- Incident Response Planning

- Vulnerability Scanning
- Intelligence Sharing



- Network Monitoring
- IDS/IPS

- Phishing Testing
- Awareness Training
- Red Team Exercises



Intelligence Sharing



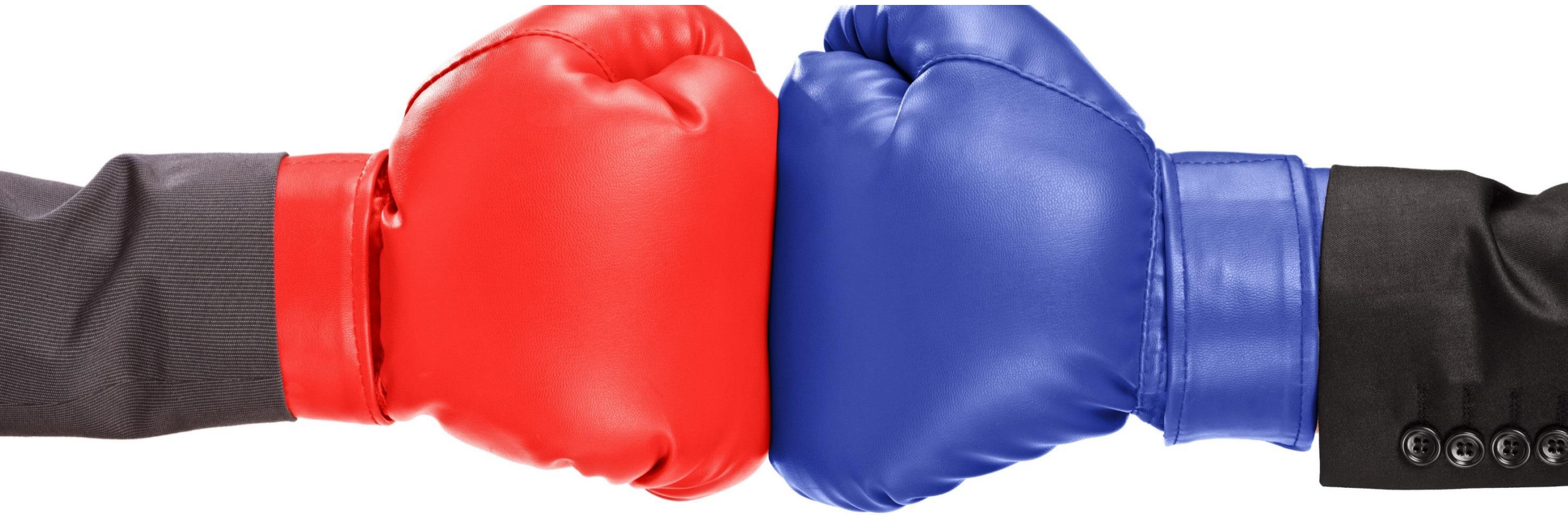
- Annual Awareness Training for all staff
- Additional Training for staff who fail the Phishing Tests

Help Joe beat the hacker. What's wrong with this email?
CLICK on the best answer.

View
Discover email.

- 1 There are grammar and punctuation errors in this email.
- 2 If Joe doesn't click on the link there could be consequences.
- 3 The **FROM** line looks suspicious.
- 4 All of the above.

Red Team/Blue Team Security Testing





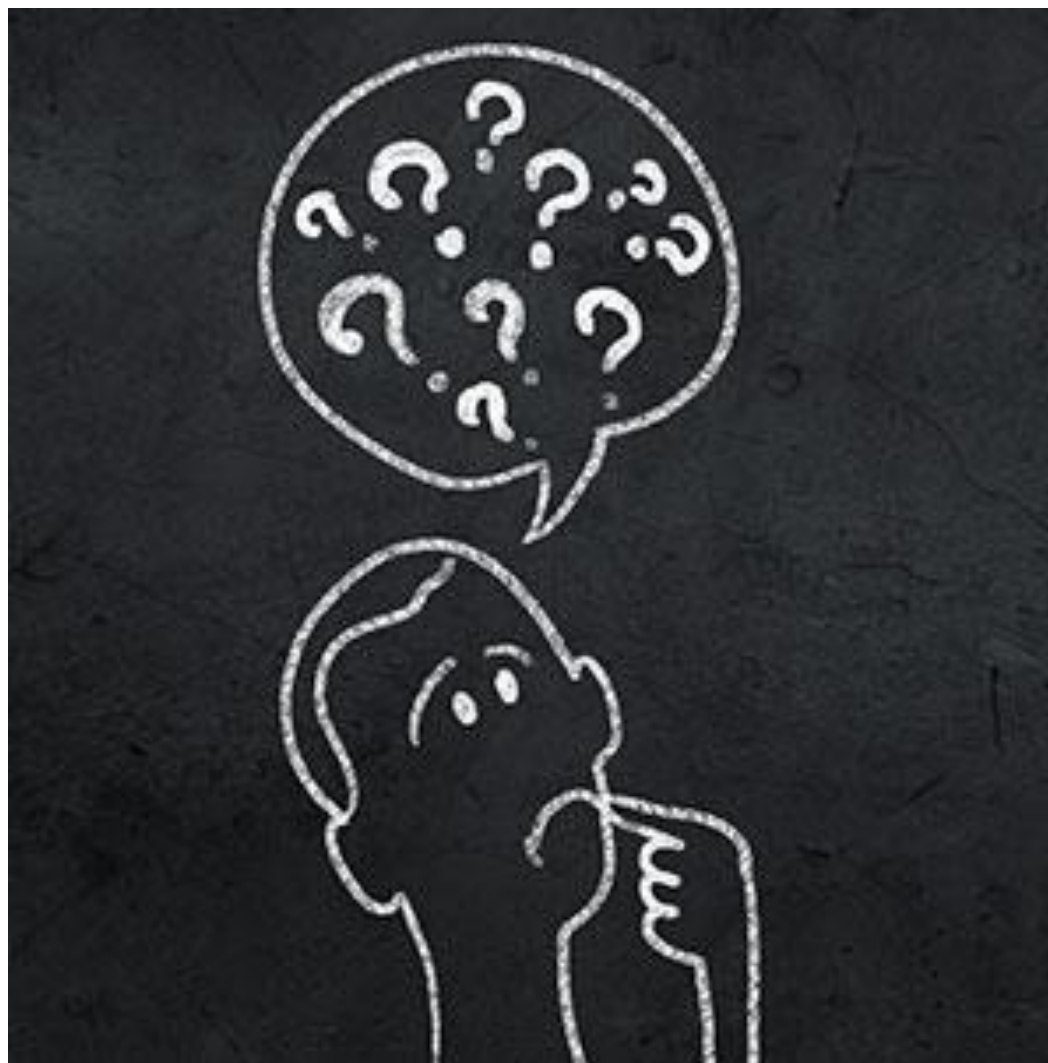
- **IPS/IDS**
- **Log Analysis**
- **File Integrity Monitoring**

Incident Response Plan



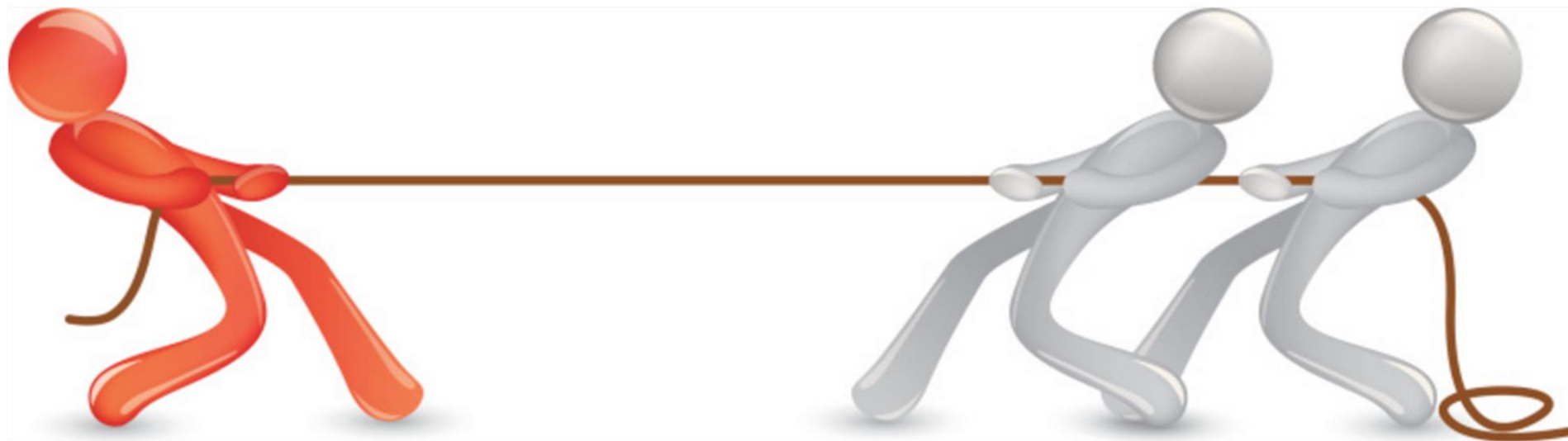


What Still Puzzles Us





Continuous Struggle



Progress

V

Security & Stability





In Summary

- ➔ Security Landscape has changed
- ➔ Airlines are not immune
- ➔ Internal staff are the biggest security risk
- ➔ Assume things will go wrong and plan for it
- ➔ Good DR is key
- ➔ You need a security strategy





@RyanairLabs

