#ITCon22

Security: Rolling with the Punches

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Todays Presenter:

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“Know thy enemy”

If you know the enemy and know yourself, you need not fear the result of a hundred battles.

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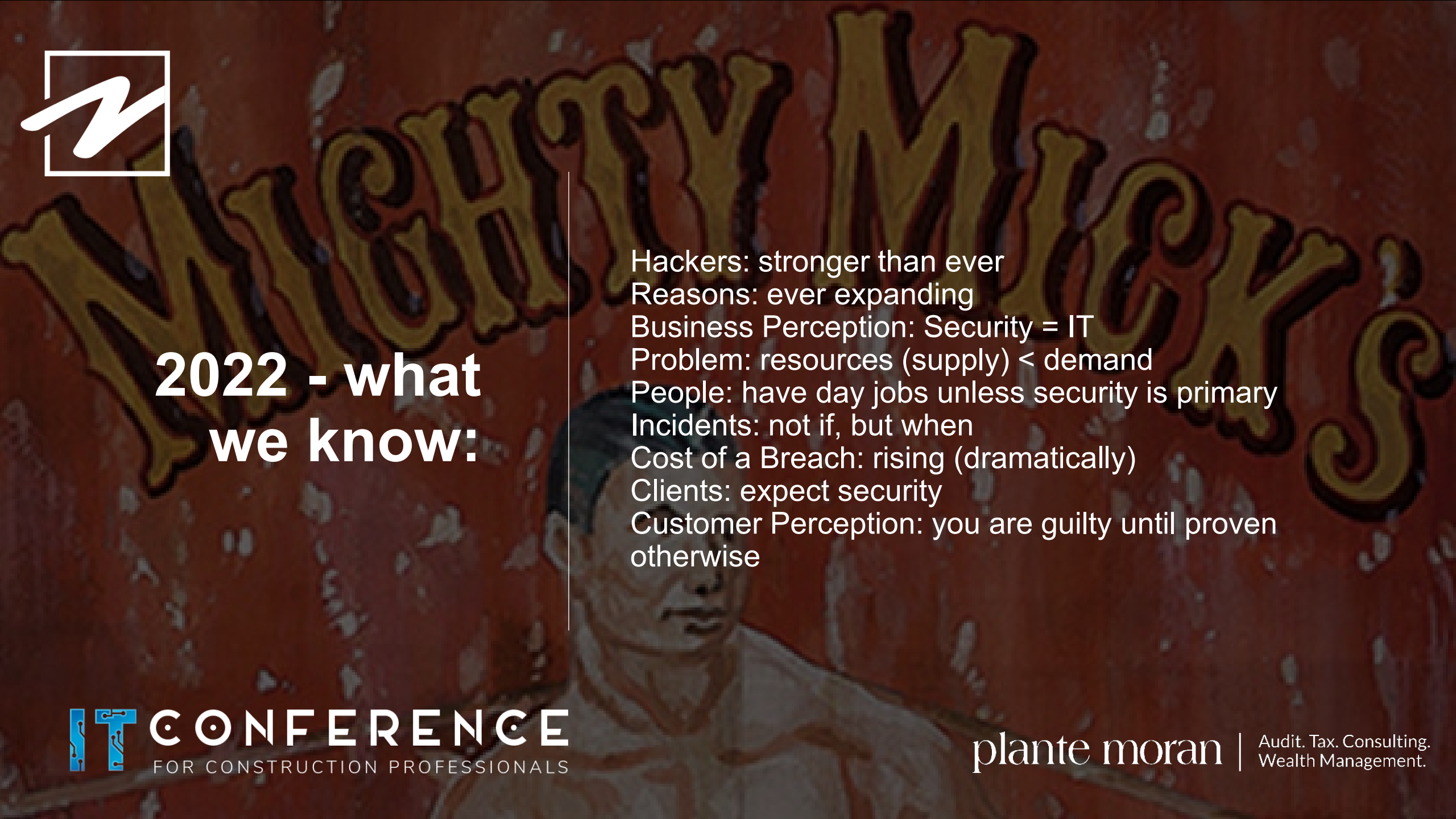
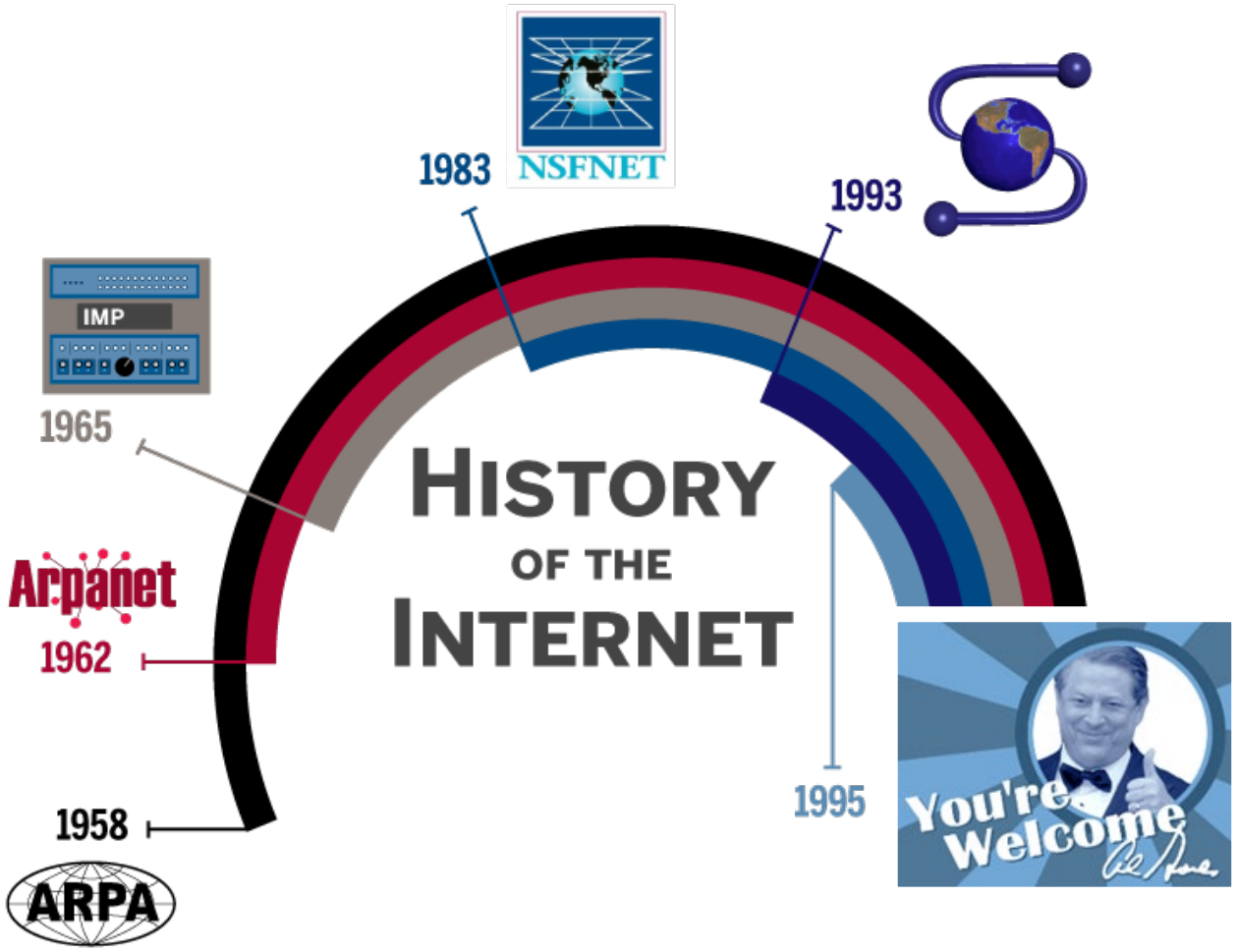


2022 - what we know:

Hackers: stronger than ever
Reasons: ever expanding
Business Perception: Security = IT
Problem: resources (supply) < demand
People: have day jobs unless security is primary
Incidents: not if, but when
Cost of a Breach: rising (dramatically)
Clients: expect security
Customer Perception: you are guilty until proven otherwise

How did we get “here”?

- The Internet was never designed with security in mind!
- Today, there are 22 billion connected devices
- By 2025 data from connected devices will go from 4 zettabytes (ZB) to 175 ZB



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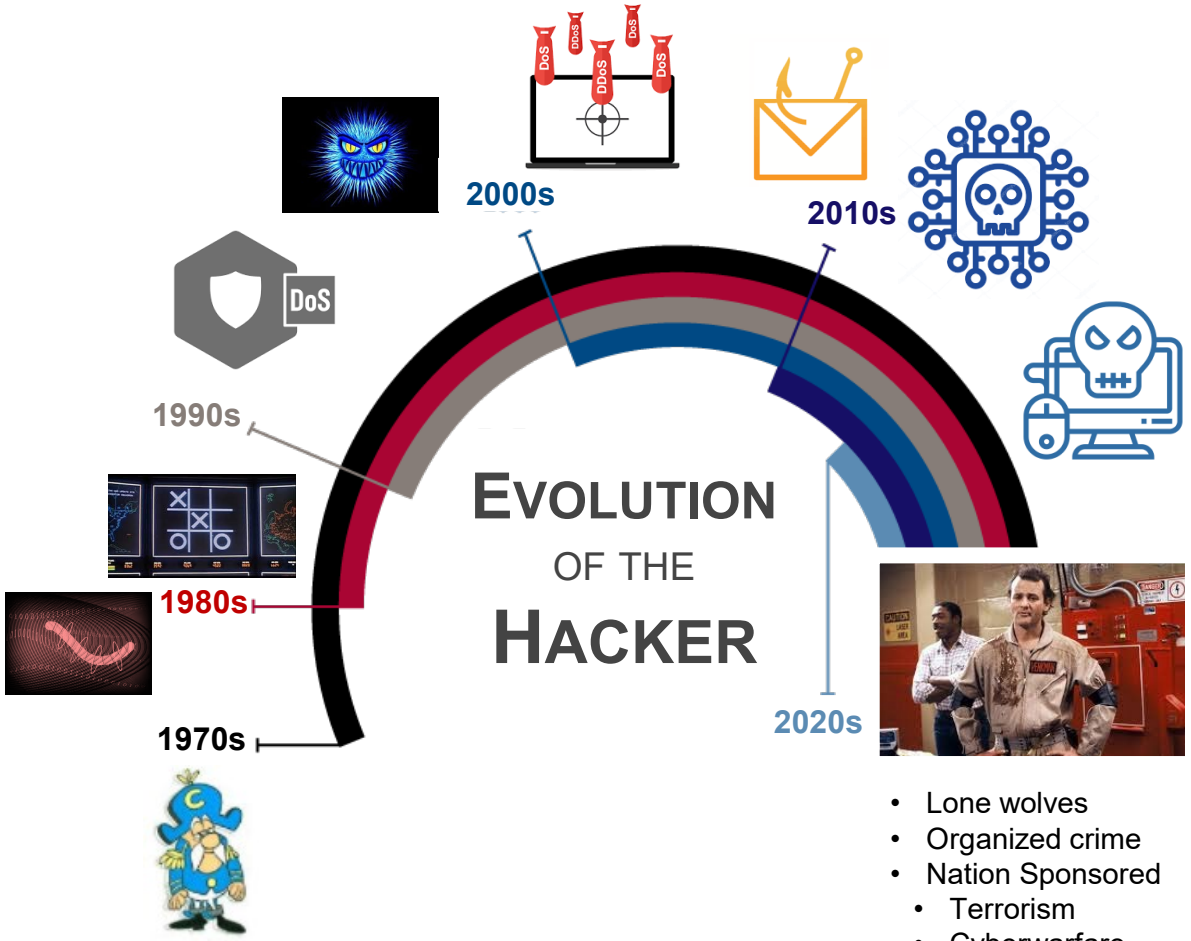
How did they get “here”?

- Started with a toy in a cereal box!
- Seemed more a nuisance, but hey – we’re not a target
- “Cats and Dogs, living together… Mass hysteria!”



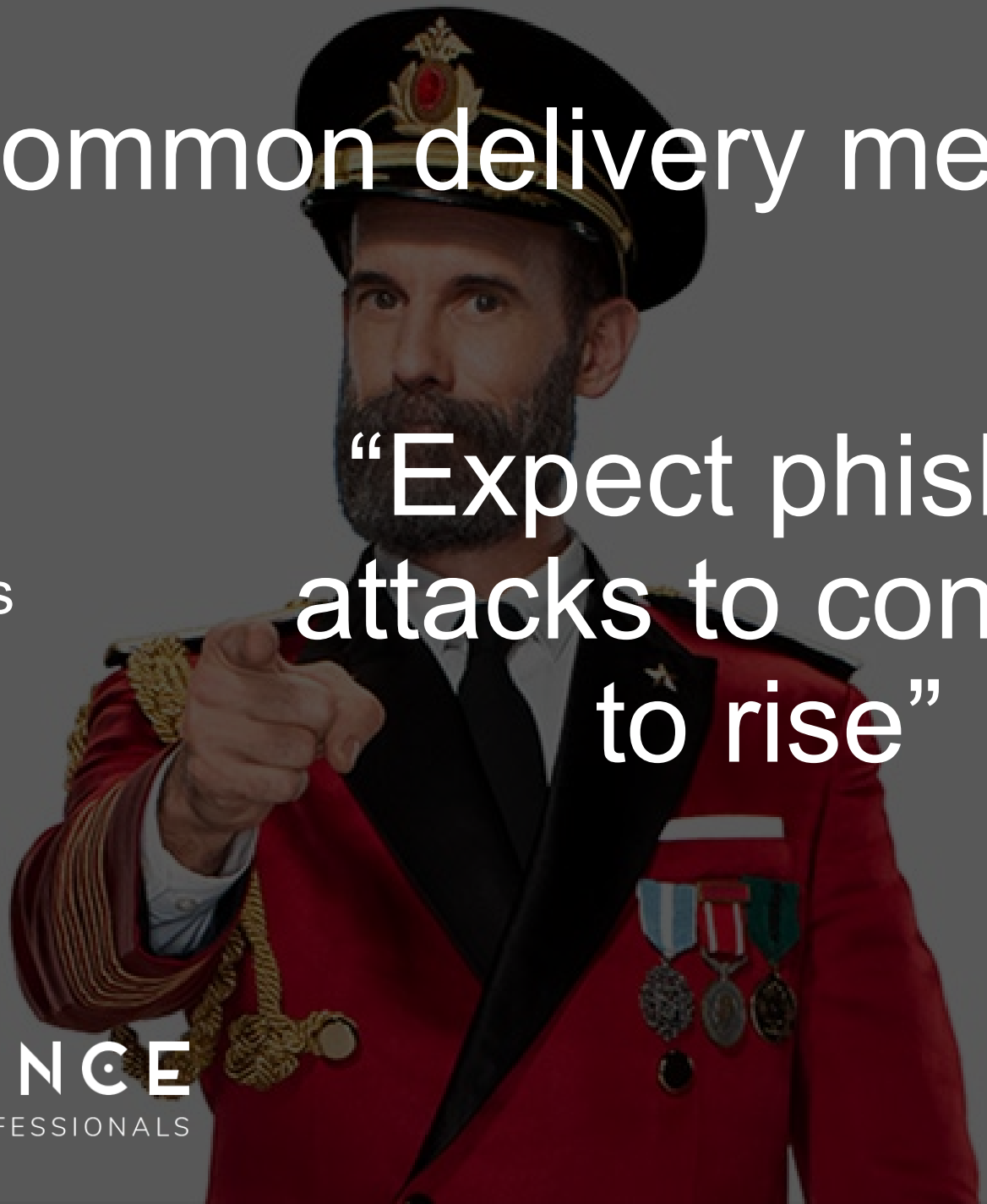
What is our current “reality”?

- Chances of getting struck by lightning: 1 in 1,000,000
- Chances of dating a millionaire: 1 in 250
- Chances of experiencing a data breach: 1 in 4

Depending on your source:

- The average time to intrusion discovery is upwards of 250 days
- The average cost of a data breach $800,000 – several million
- Spent another $900,000 – several million to restore normal business in the wake of successful attacks

Most common delivery method



"Expect phishing attacks to continue to rise"

- Captain Obvious

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Three Most Likely Attack Strains
Ransomware
software designed to deny access to a computer system or data until a ransom is paid.
Malware
Software that is intended to damage, disable, or provide remote control over computer systems
Password Attacks
Easily guessed, cracked, or given away
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Did you see this one coming?

Did you know: Most of the vulnerabilities exploited throughout 2021 continued to be ones known by IT professionals at the time of the incident?

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Let’s “understand the ring”

What are you protecting?

Where are you protecting it?

How are you protecting it?

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Let's define "security"

- What is your organizations understanding of security?
  - Information Technology
  - Marketing, Sales, Client/Customer Service
  - Legal, Contracts, Vendor Management, Compliance
  - Physical Security, Worksite Security, Worksite Safety, Operations
  - Accounting, Finance…. Shall I go on?

Security maturity

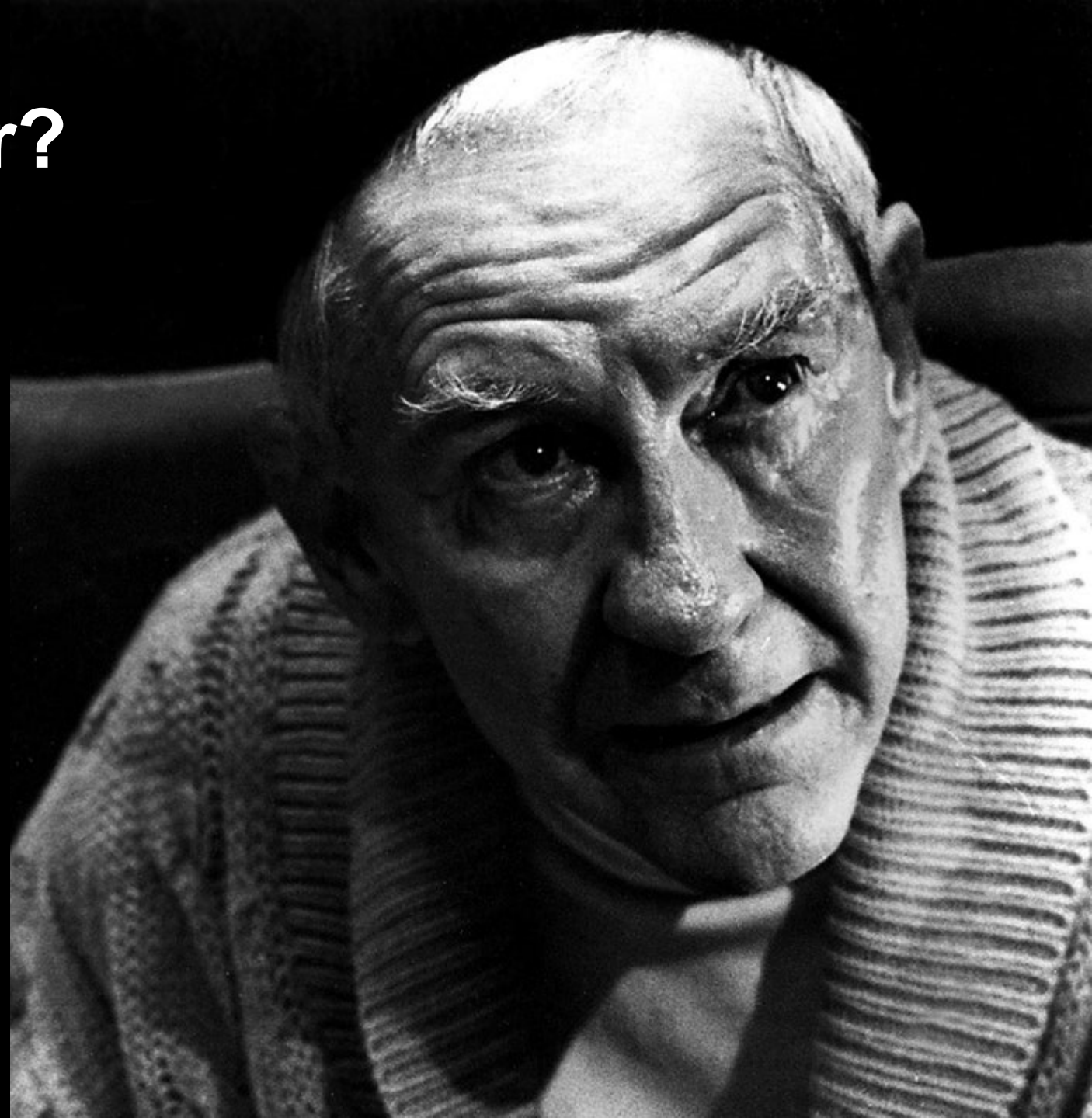
- What is the current maturity level of security within your organization?
  - Does the organization have an overall Security Strategy?
  - Is the responsibility for security a secondary function of a group(s)?
  - Does Security have its own “run budget”? What about “new asks”?
  - Do you have the programs necessary to stay ahead of security?
  - Do you have the tools necessary to make security visible?
  - What is your culture? Are your leadership and people buying into it?

A complete view

- Do you know what you are protecting?
  - Do you know where everything is?
  - Do you have all the tools you need to protect it?
  - Are people incentivized to protect it?
  - Do you understand the risks?
  - Do you monitor risk?
  - Do you adjust as risk changes?

Who’s in your corner?

“The world ain’t all sunshine and rainbows. It’s a very mean and nasty place and I don’t care how tough you are it will beat you to your knees and keep you there permanently if you let it.”



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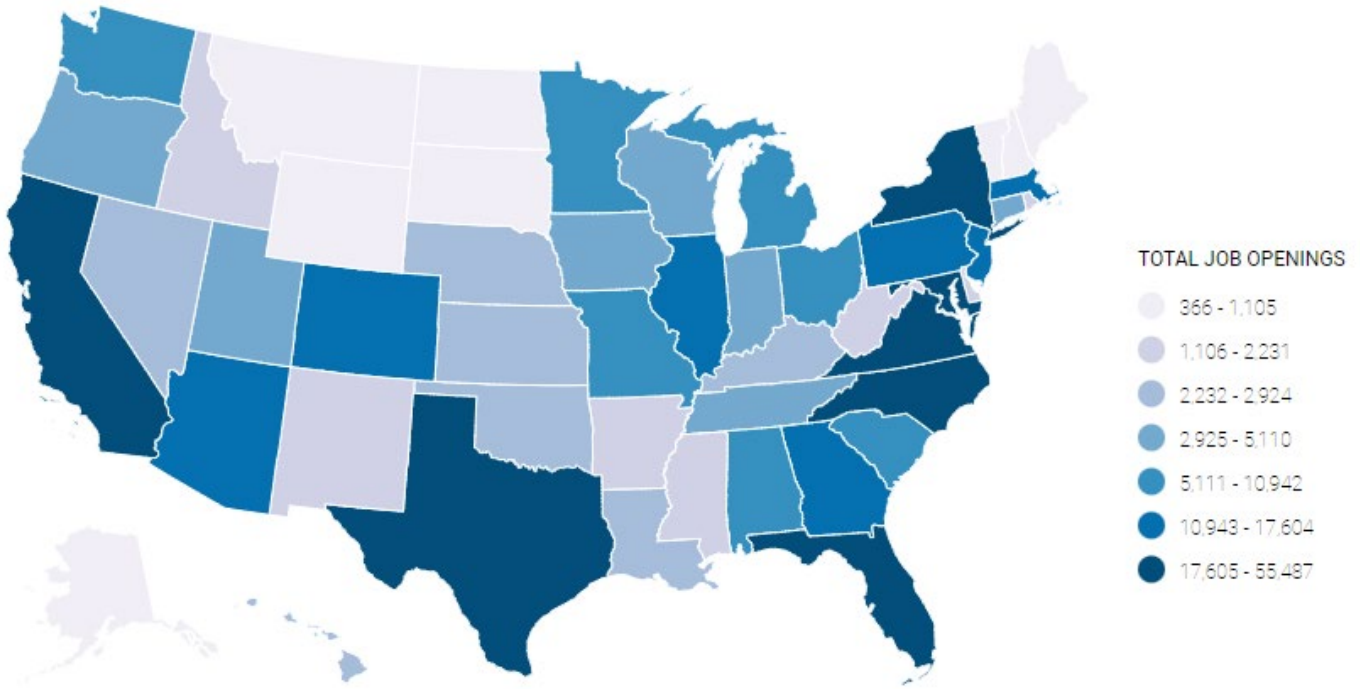
Where is the help?

- 464,420 open cybersecurity positions currently unfilled in the United States alone
- 2.93 million open cybersecurity positions currently unfilled world-wide
- Biggest complaints from those leaving Cybersecurity: limited budgets, limited training, always on the clock



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“Know thyself”

How prepared are you for this fight?

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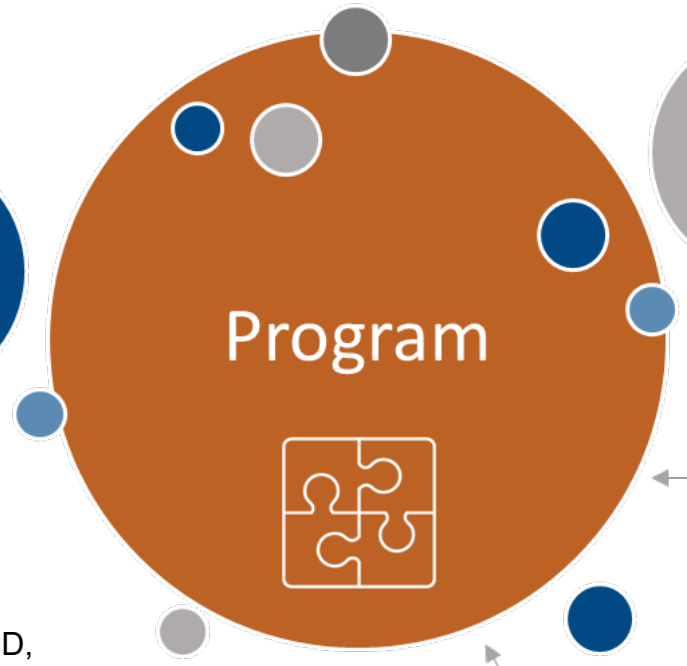
Asset Management: what we see



Ad Hoc: replaced after an issue, not planned on a schedule

Overlooked: overly reliant on automated solutions (even after known issues)

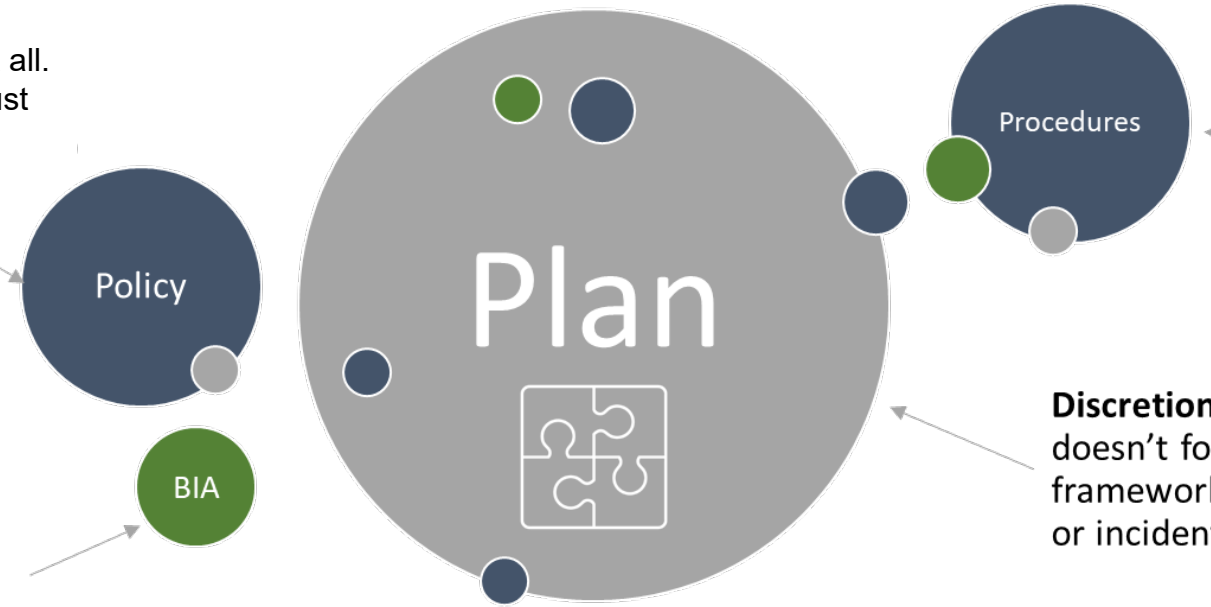
Outdated: Controls in place not focused on risks of remote workforce and ransomware threats of 2022

Blind Spots: Mobile Devices, BYOD, IOT, "exceptions to the rule" are not tracked and therefore not secured to company standards (if those standards exist)

Decentralized: owners don't always consider all business, cloud or vendor systems (aren't aware of)

Business Continuity: what we see

Vanilla: If they exit at all. Gathering dust as we speak



Subjective: indiscriminate inclusion/exclusion of certain procedures

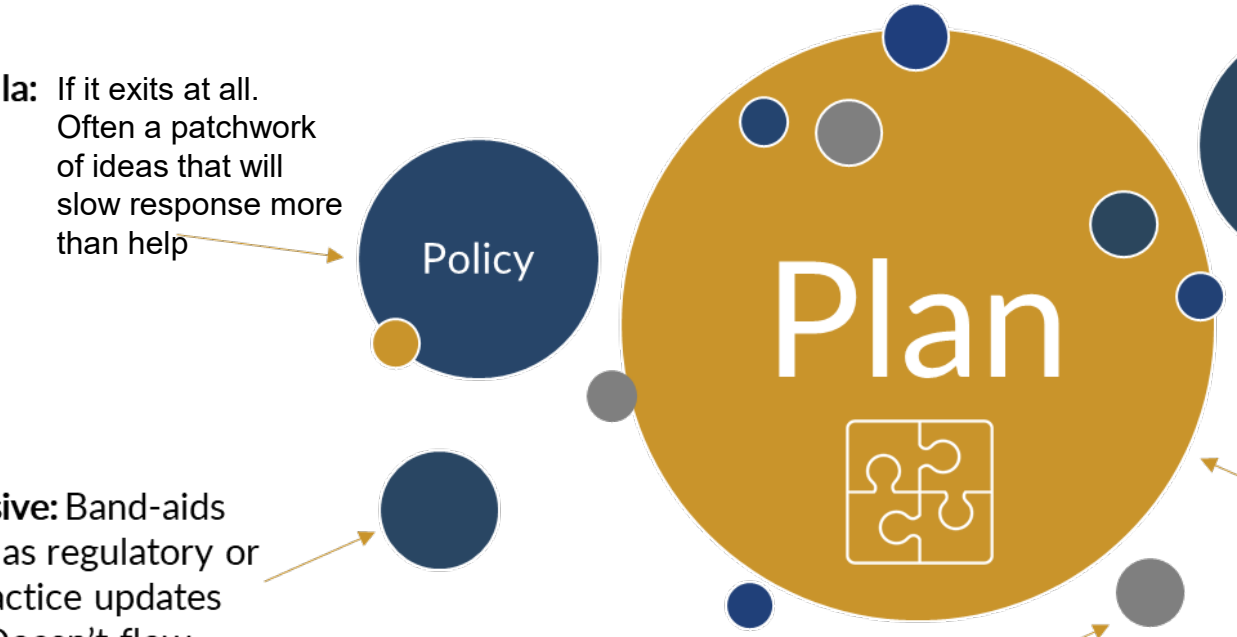
Discretionary: Generally doesn't follow a defined framework for all events or incidents to follow

IT Centric : Heavy on opinion from IT, the user is an afterthought. Not cohesively integrated in the overall program

Incohesive: Band-aids applied as regulatory or best practice updates occur. Doesn't flow.

Inconclusive: Specific business unit continuity testing either untested or testing undocumented.

Incident Response: what we see



Vanilla: If it exits at all. Often a patchwork of ideas that will slow response more than help

Subjective: indiscriminant inclusion/exclusion of certain procedures

Incohesive: Band-aids applied as regulatory or best practice updates occur. Doesn't flow.

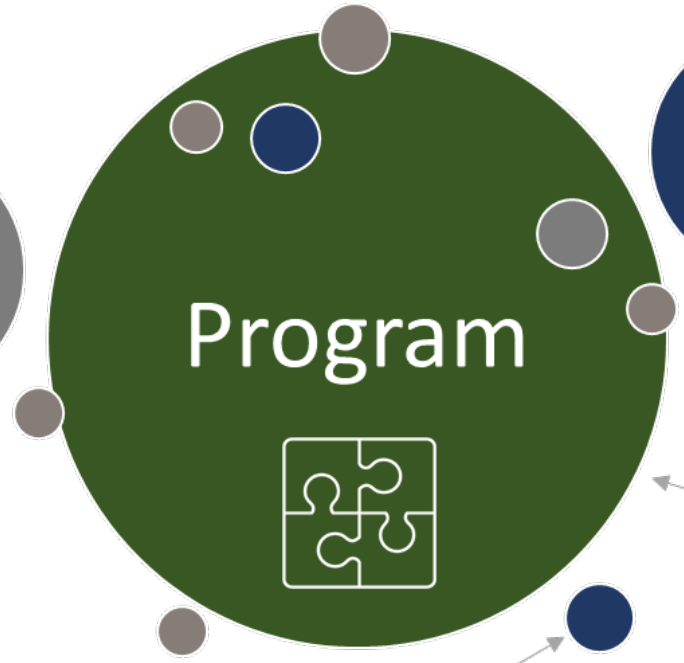
Discretionary: Generally doesn't follow a defined framework for all events, incidents and breaches to follow

MIA: Incorporation of information sharing, threat intelligence, and vulnerability management

Missed Opportunities: Results rarely incorporate back into the User Awareness Program

Vendor Management: what we see

Boilerplate: often not reviewed by security and key departments to ensure appropriate responsibilities are included



Point-in-time: not updated as relationship expands and reliance on vendor grows

No Teeth: Risk concerns and exceptions do not impact actual vendor relationships

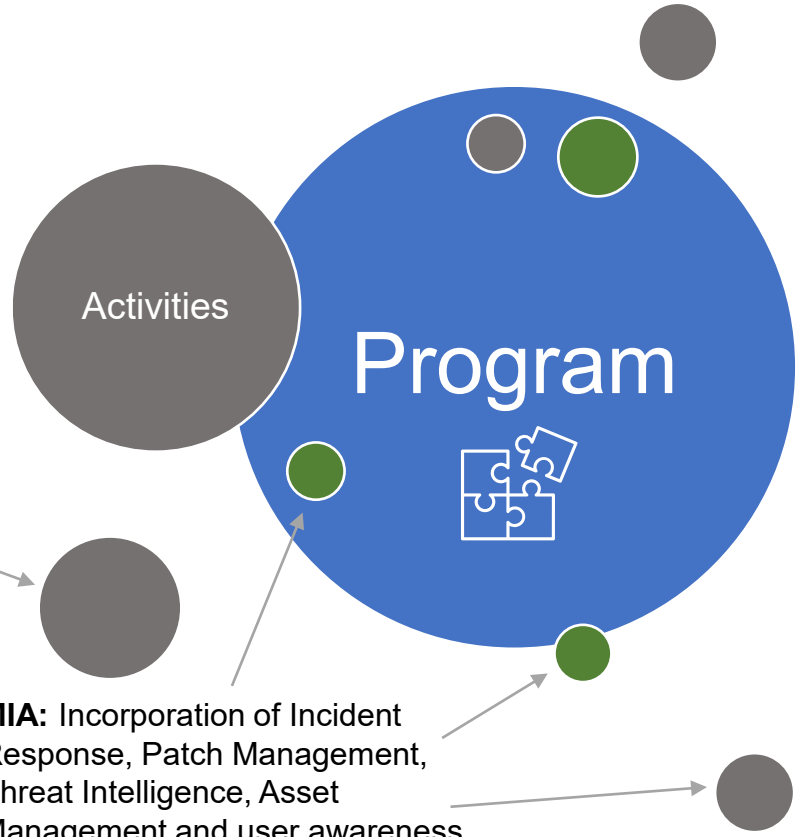
Inefficient: Annual reviews of information that does not tie to actual business risks

Lost in translation: "User Controls" are informally considered (at best) and are not incorporated into risk assessment or practice

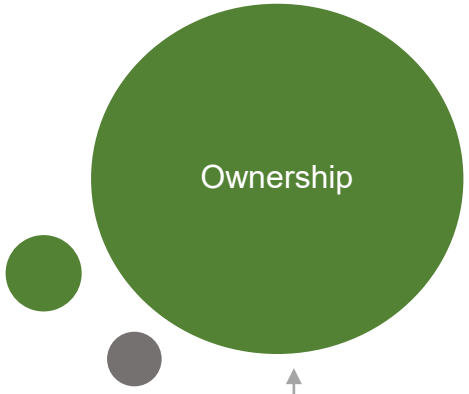
Vulnerability Management: what we see

What's the goal: Activities are undefined and inconsistently executed. Historical comparisons often unavailable due to inconsistencies

Who's on first: Output acted upon inconsistently, and progress is rarely monitored or enforced. IT has day jobs!



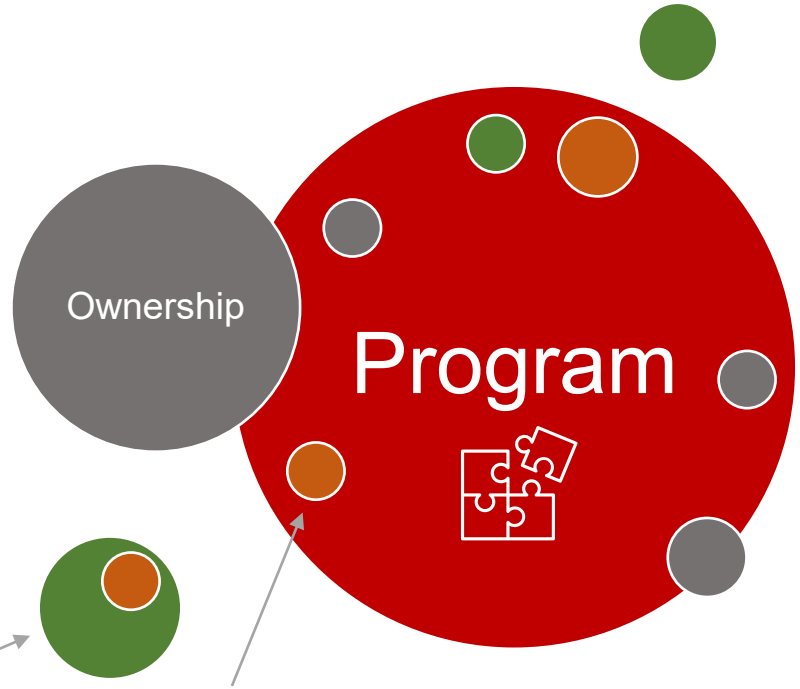
MIA: Incorporation of Incident Response, Patch Management, Threat Intelligence, Asset Management and user awareness



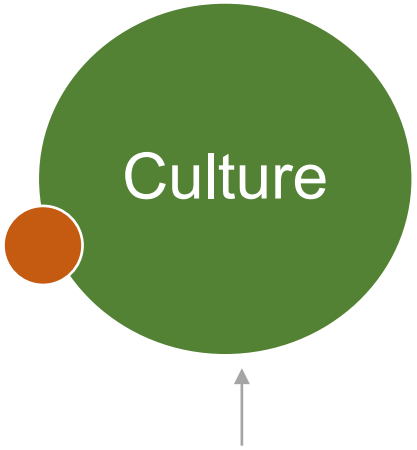
Dead on the vine: Consumed by IT, but rarely (never) summarized and reported to business leaders in a nontechnical/digestible way. Often resulting in reactive funding for security projects

Compliance Management: what we see

What's the goal:
Management expects IT to drive compliance without considering the cost (cultural, $, and time.) IT aren't compliance experts often biting off more than they can chew.



Pushing Paper: Development of Policy and Procedure is driven by governing body, often templates are used with the goal of checking a box. Culturally integration fails.



Belief: Compliance equals effort. Shortcuts are identified and compliance becomes a façade. The house of cards crumbles when an incident is severe.


Strategy without tactics is the slowest route to victory. Tactics without strategy is the noise before defeat
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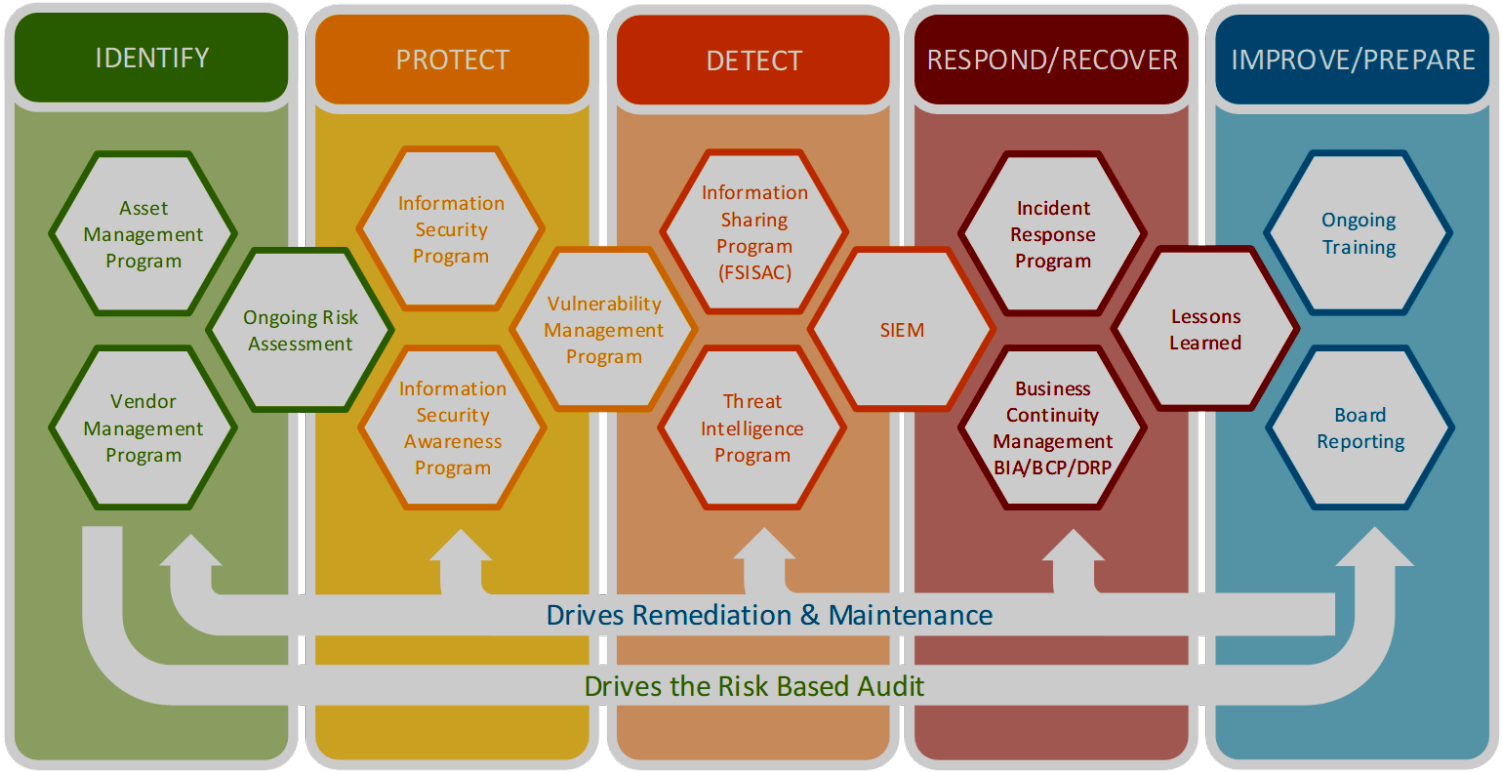
What's your strategy?

Let's learn from a highly regulated industry:



“The controls you’ve implemented today won’t necessarily address the risks of tomorrow.”

- Understand the ring
- Cybersecurity Strategy& Resource Planning
- Incident Response Planning
- Vulnerability Management Program
- Vendor Management
- Annual Assessments
- Strong Partnerships
- Know thyself

What does the future hold?

"The secret to your future is hidden in your daily routine."

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Questions?