

Know yourself

Strategies employed
for understanding
the **attack surface**

Grant Paling
Product Manager

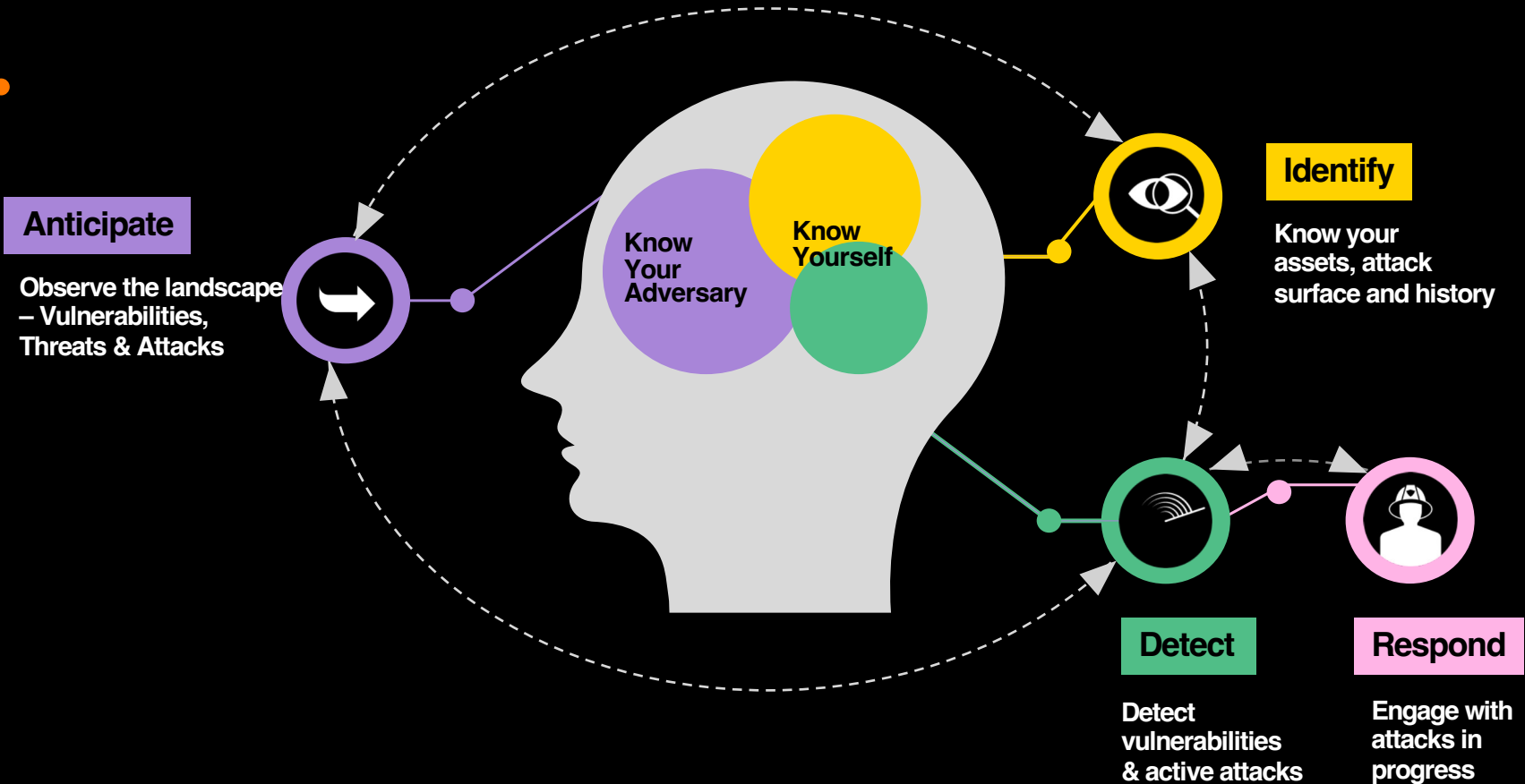


Cyberdefense

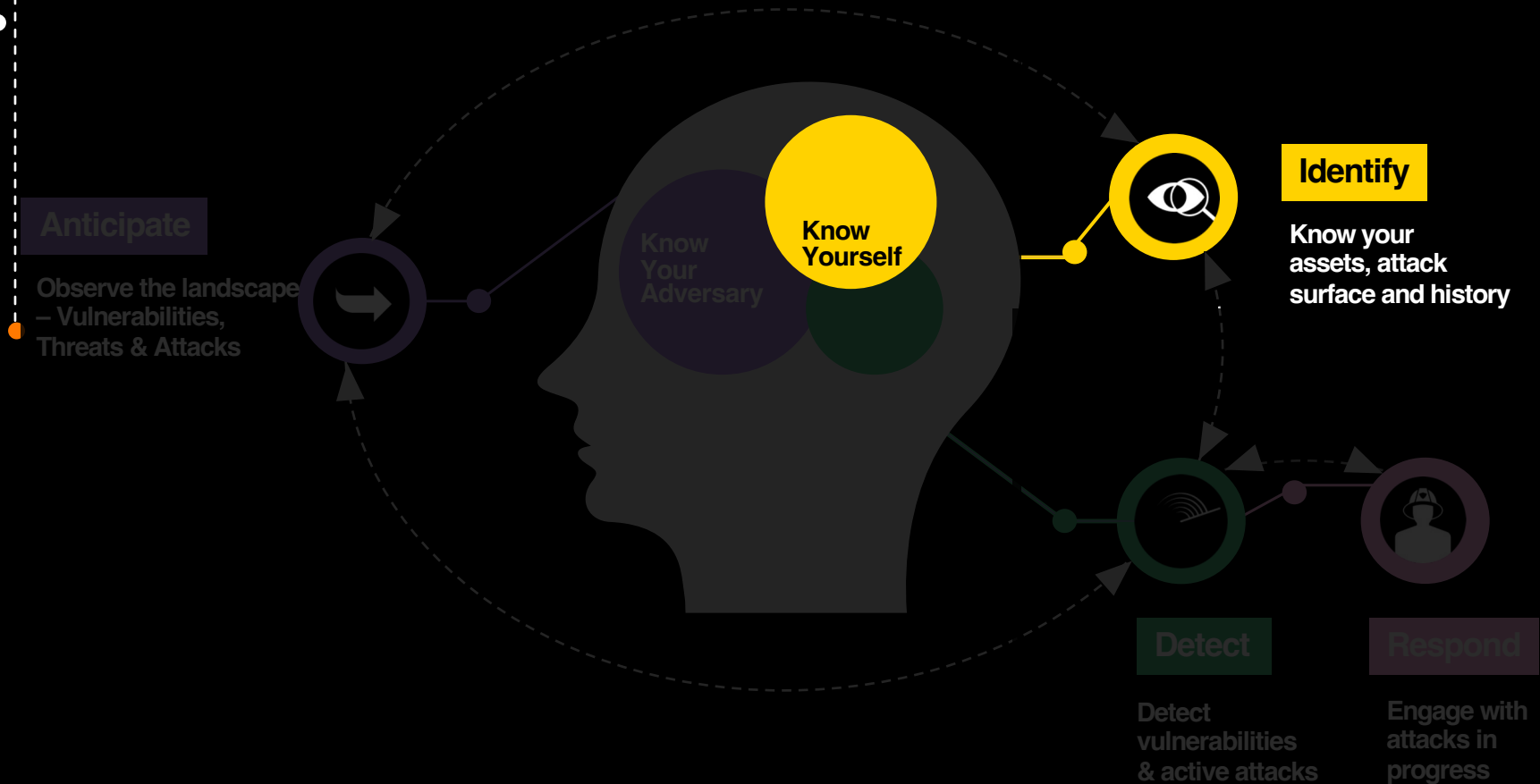


Hello!

Intelligence-led security requires two perspectives



The weakest link



Same stuff, different year

CIS Controls Version 7

01	Inventory of Hardware
02	Inventory of Software
03	Continuous Vulnerability Management
04	Control of Admin Privileges
05	Secure Configuration
06	Maintenance and Analysis of Logs
07	Email and Browser Protections
08	Malware Defenses
09	Limitation of Ports and Protocols
10	Data Recovery
11	Secure Configuration of Network Devices
12	Boundary Defense
13	Data Protection
14	Controlled Access Based on Need to Know
15	Wireless Access Control
16	Account Monitoring and Control
17	Security Awareness Training
18	Application Security
19	Incident Management
20	Penetration Testing



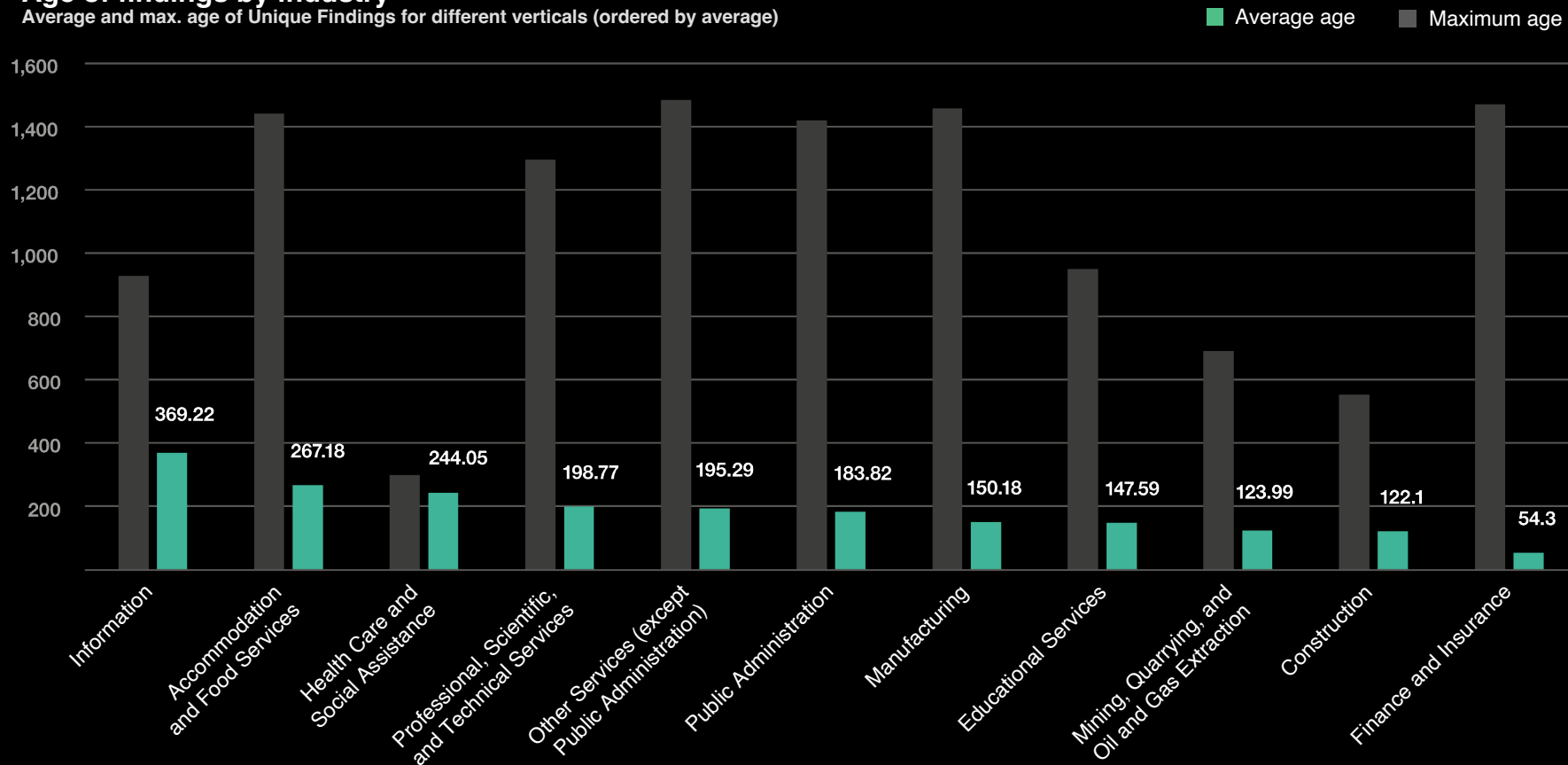
CIS Controls Version 8

01	Inventory and Control of Enterprise Assets
02	Inventory and Control of Software Assets
03	Data Protection
04	Secure Configuration of Enterprise Assets and
05	Account Management
06	Access Control Management
07	Continuous Vulnerability Management
08	Audit Log Management
09	Email and Web Browser Protections
10	Malware Defenses
11	Data Recovery
12	Network Infrastructure Management
13	Network Monitoring and Defense
14	Security Awareness and Skills Training
15	Service Provider Management
16	Application Software Security
17	Incident Response Management
18	Penetration Testing

The problem is clear, how to solve it is not

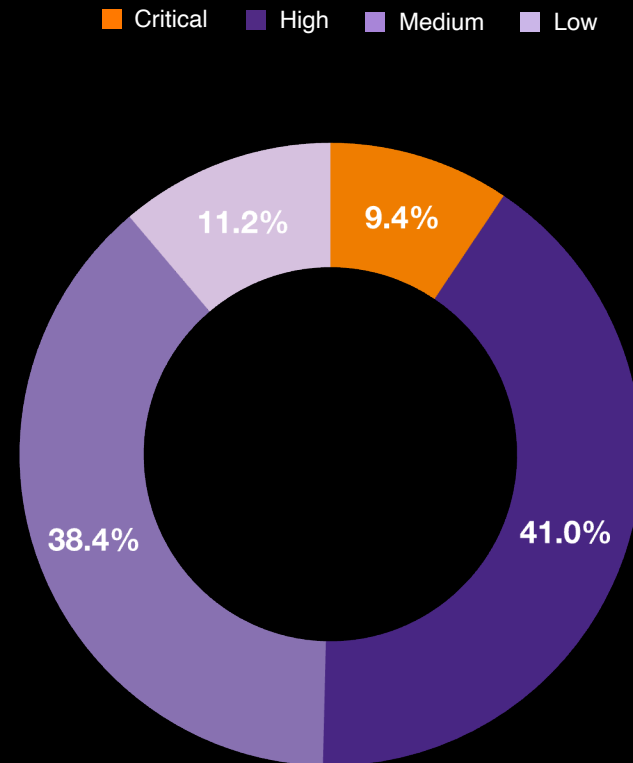
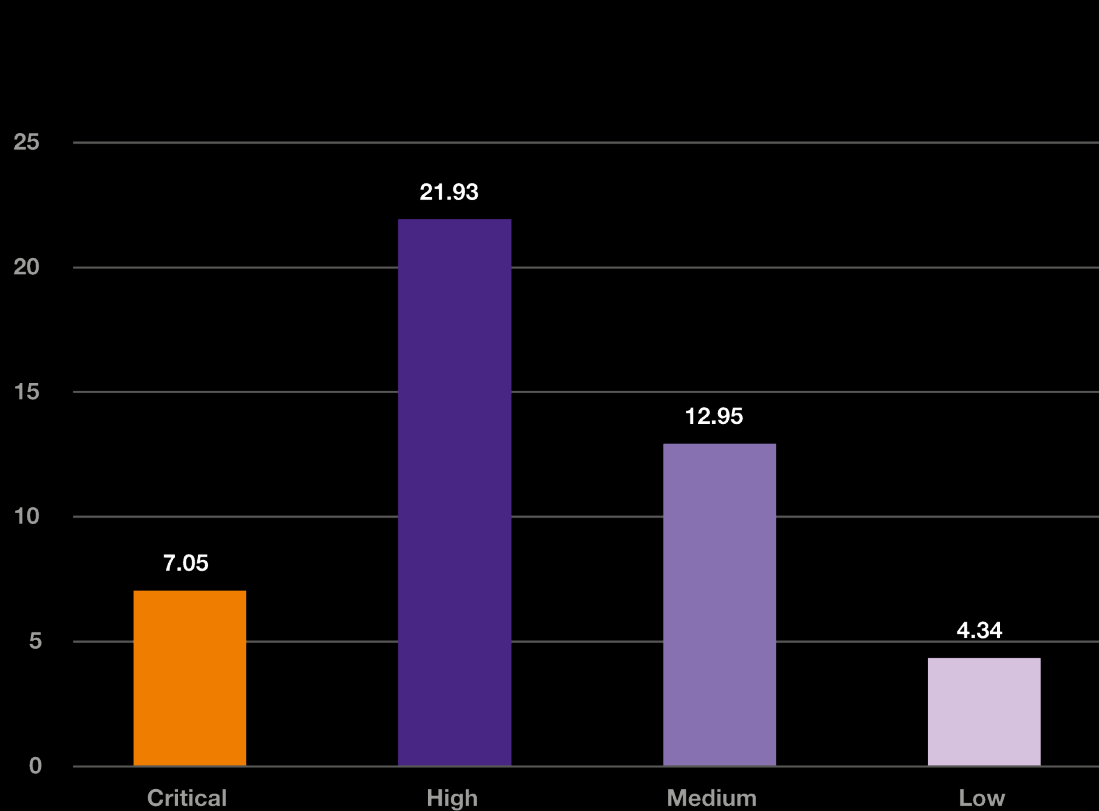
Age of findings by industry

Average and max. age of Unique Findings for different verticals (ordered by average)



Severity of findings

Average findings per unique asset and total severity distribution



Let us sidestep
for a moment...

Orange
Cyberdefense

Incident Response War Story



Scotty Walker



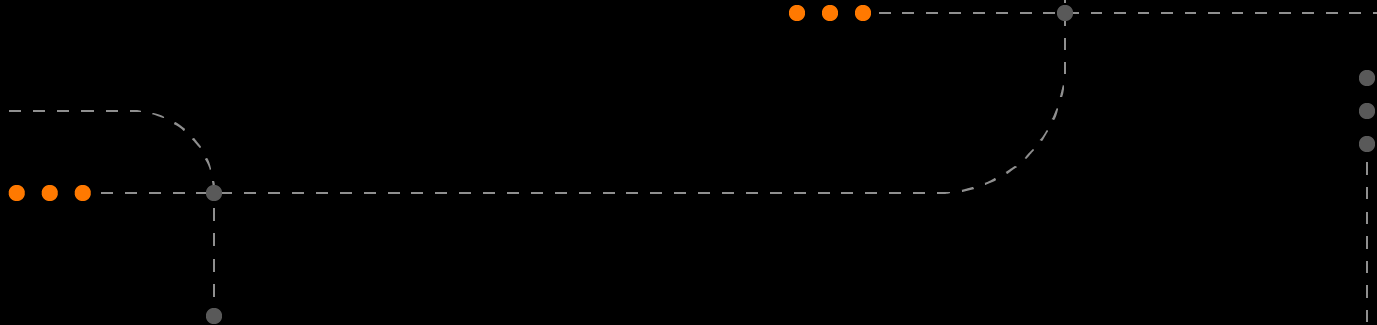
Friday evening just about to pour a beer
when....

When everything is going wrong
in your life but you're used to it



Case Overview

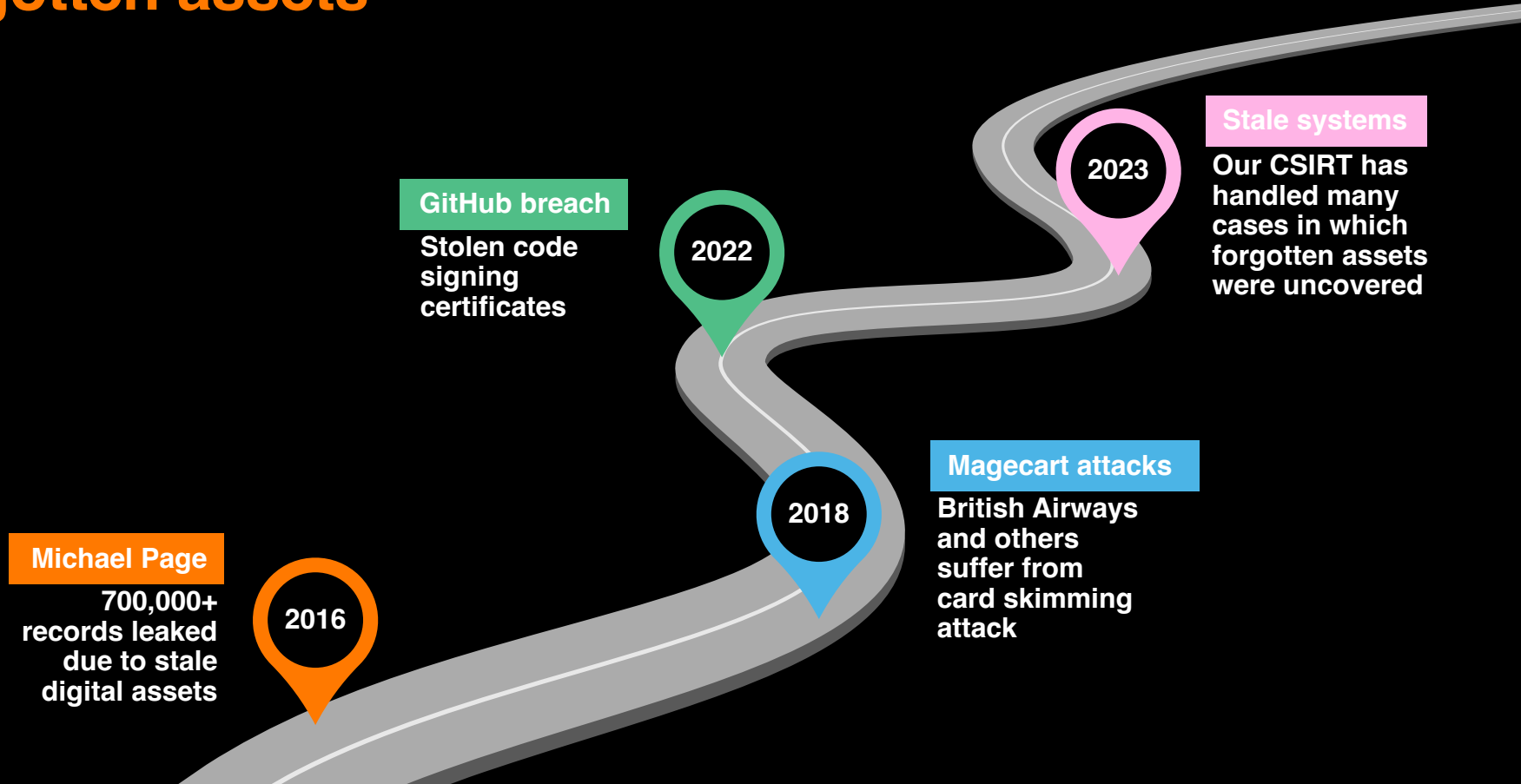
- Information passed by Interpol from a seized attacker server which contained the output for the clients Active Directory.
- Immediate containment of the affected Domain.
- Cobalt Strike Beacons not one but two on the Domain controllers and servers.
- Found the insecure Citrix gateway that was the initial point of entry.







A long history of unknown or forgotten assets



The expansion of the problem

**“I don’t know what
to patch first.”**



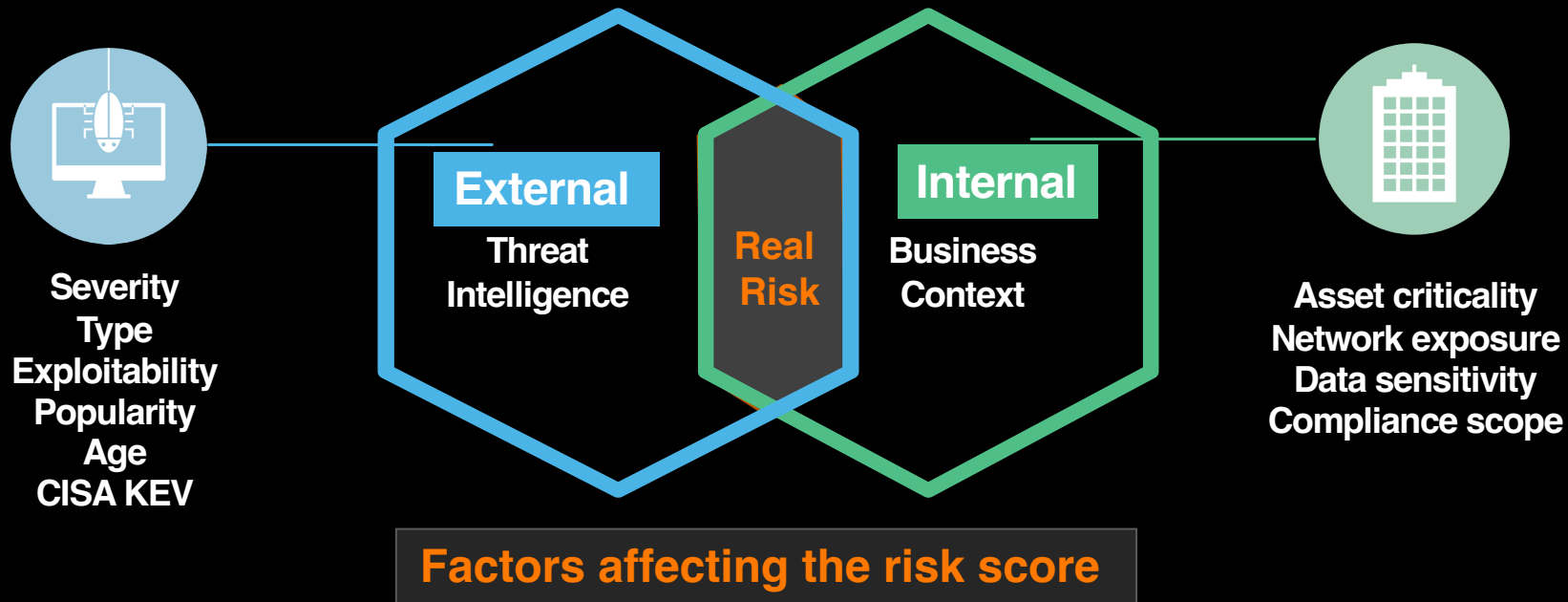
**“I don’t have a unified view
of my riskiest assets.”**



**“I’m not even sure I
know that I have
visibility of all my
assets.”**

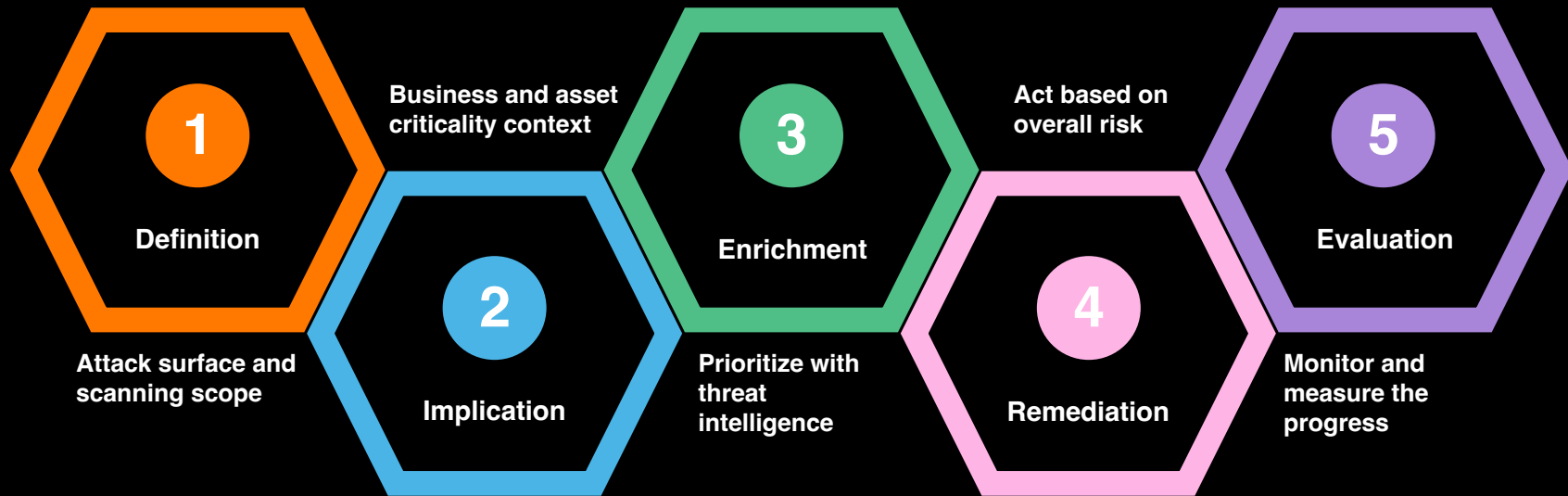


Business context and threat intelligence correlated to focus on the real organizational risk



Our approach

How to embrace risk-based vulnerability management



30%

**What am I
going to do?**



How should **you**
do it?



Who you think you are, your alias's and
your history, ... **The Full Picture**

Scan the internet for **Every Asset**
linked to you

Aggregate and augment to discover
your **True** Attack Surface

Inside our Vulnerability Operations Center

Going above and beyond for our customers

Zero-Day for Cisco IoT XE

Remote code execution capabilities, potentially thousands of exposed instances. Massively exploited in the wild.



17/10/2023

High-risk targets identified

No patch available and 34k devices potentially compromised. Scanning results are shared with customers. Going beyond scanning to ensure the risk was identified and mitigated *fast*



16/10/2023



Asset enumerations conducted

Complete threat analysis report pushed out to all Orange Cyberdefense customers. Script developed and run by our CERT to identify exposed devices.

18/10/2023

Use case - Ivanti



Ivanti Connect Secure VPNs are used for **remote work**: these software are widely used by large corporations and for extensive usage. In January 2024, the products have been compromised for **espionage attacks** by an advanced Chinese Nation-state threat actor.

27 000 exposed assets have been identified when vulnerabilities were published.



The CERT Orange Cyberdefense has been able to quickly identify vulnerable assets, scanning internet looking for specific patterns. **670 organizations have been identified** and, from case to case, **notified diligently**.



Notifications led us to carry out **19 incident response missions**, for customers and non-customers, and **reinforced our position as an expert** within Infosec communities.

Knowing yourself is about balance

Fighting immediate threats
whilst proactively reducing risk



Knowing Yourself

Understanding your attack surface

