Microsoft

Incorporating Security Intelligence and Automation Into Digital Transformation

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Agenda

- Industry trends, Innovations, and Investments
- Notable data breaches, incidents, and attacker techniques, tactics, and procedures (TTPs)
- How are others Evolving Security with the Cloud?

Industry trends, innovations, and investments

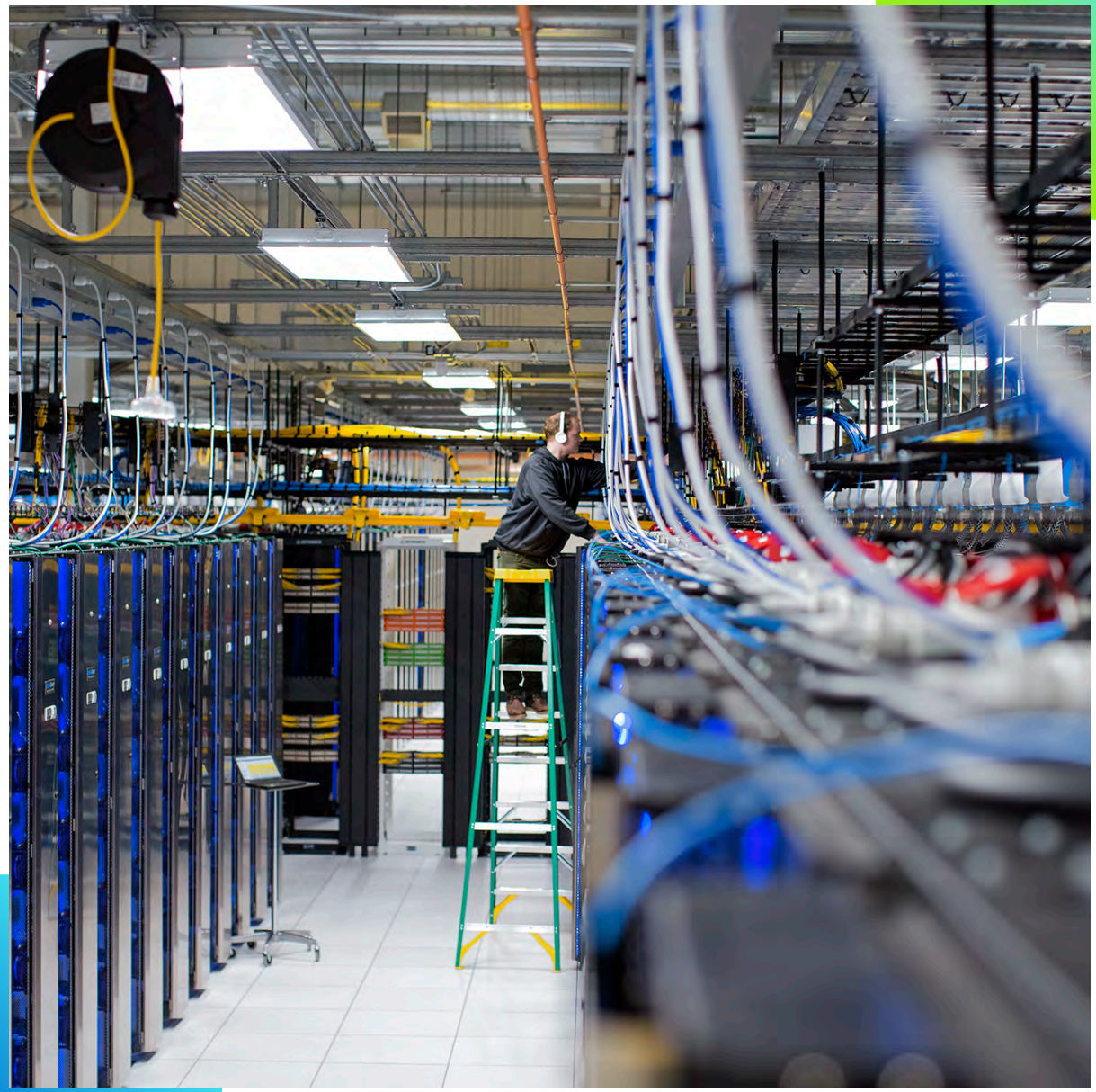
Industry trends

Cloud solutions are generally trusted by most companies

Traditional cybersecurity vendors are struggling

Identity is a key battleground with intense competition from Okta and others

Cloud solution providers are investing heavily in security and looking to seek market dominance



Talent Shortages Exacerbate Cyber Risk

- **1.5 million** unfilled cybersecurity professionals by 2020
- Burnout amongst cybersecurity professionals is extremely high

Major regulatory and legal trends

GDPR gets its teeth

- British Airways faces **$183 million** fine
- Marriott faces **$123 million** fine

Notable data breaches, incidents, and attacker techniques, tactics, and procedures (TTPs)

2019 Verizon Data Breach Report

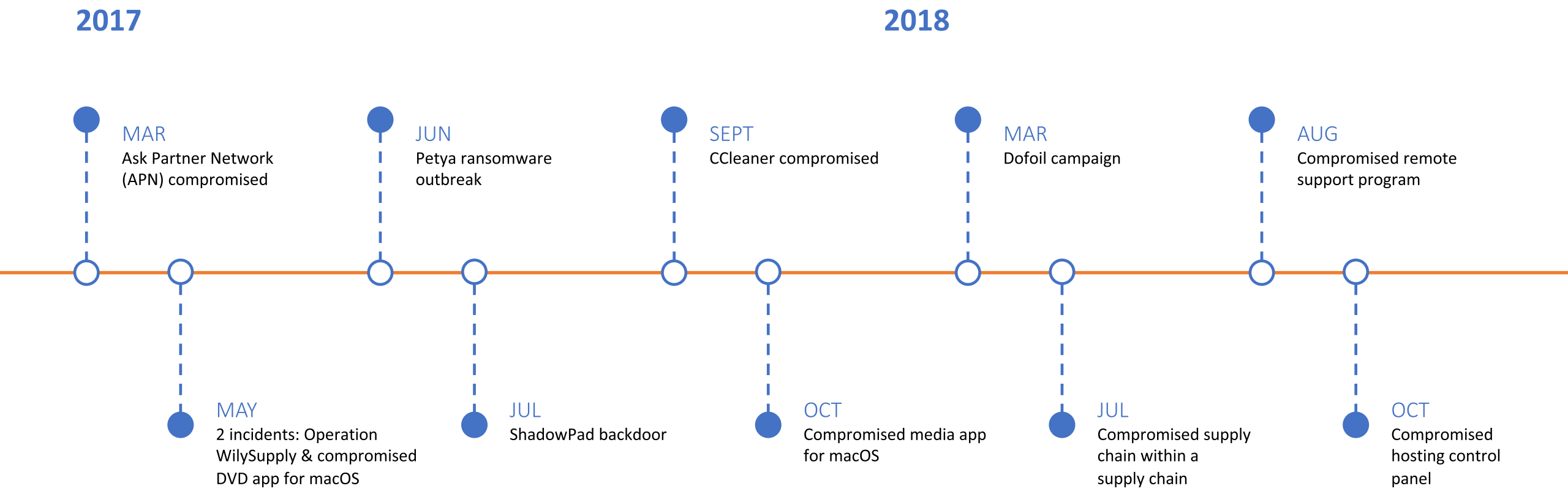
- **52%** of breaches featured hacking
- **33%** included social attacks
- Errors were causal events in **21%** of breaches
- **32%** of breaches involved phishing
- **29%** of breaches involved use of stolen credentials
- **56%** of breaches took months or longer to discover

Microsoft Security Intelligence Report

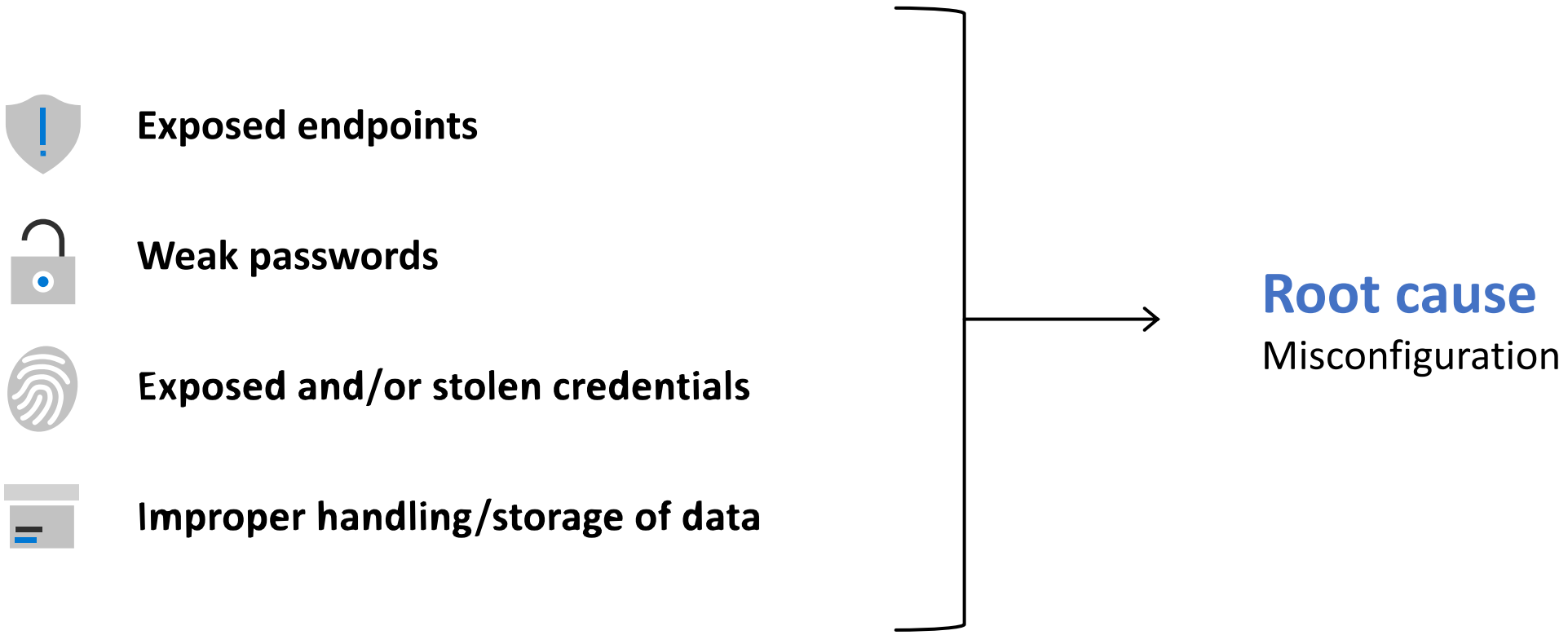
- Cloud weaponization scenarios on the rise
- Cryptocurrency mining on the rise
- Software supply chains at risk
- Phishing continues to be the preferred attack vector

Source: https://www.microsoft.com/securityinsights/

Timeline of supply chain attacks



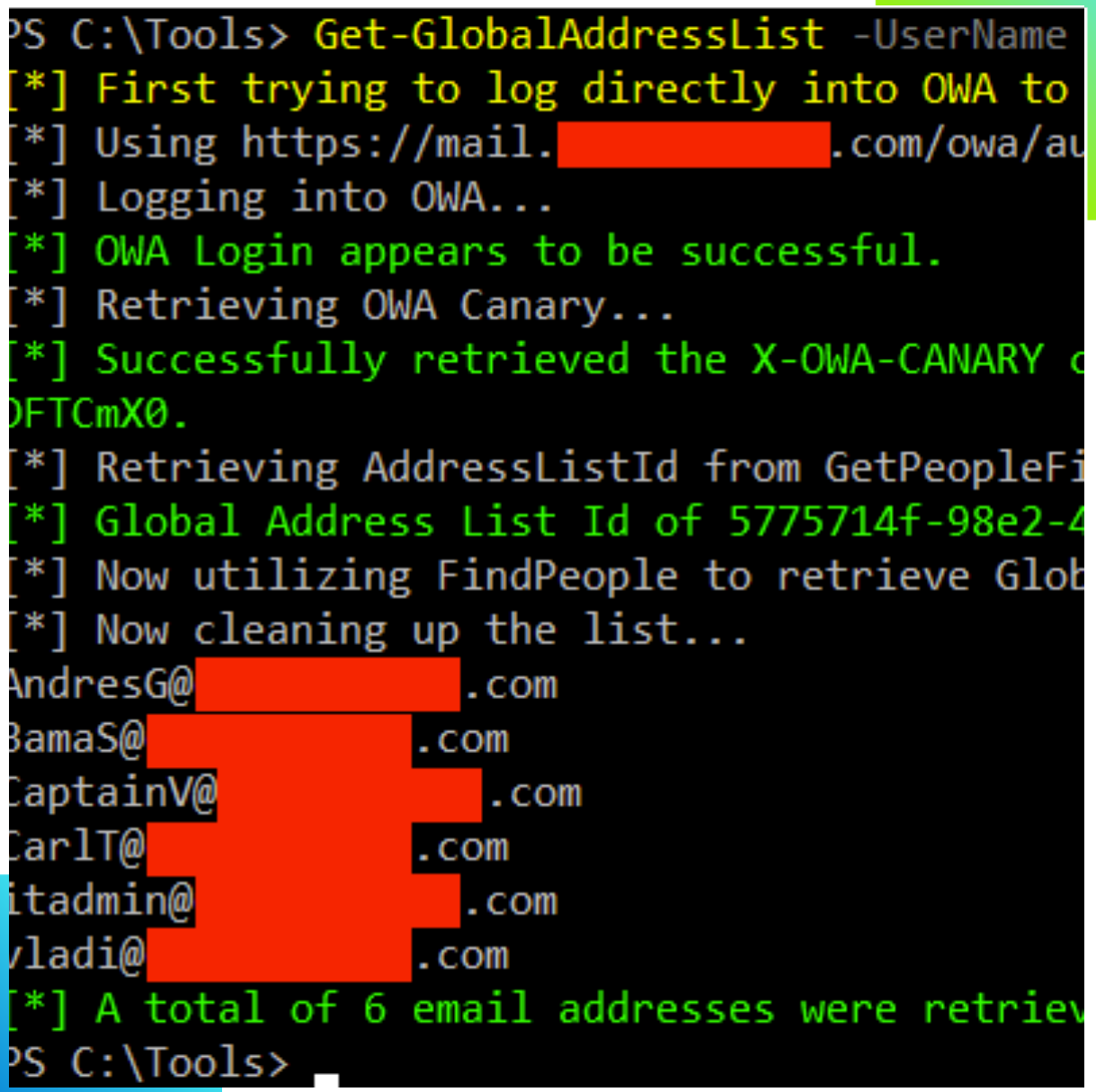
Common attacks against cloud resources



First American Corporation

850 million files, dating back 16 years, available to view online without authentication

Password spray attacks against cloud services



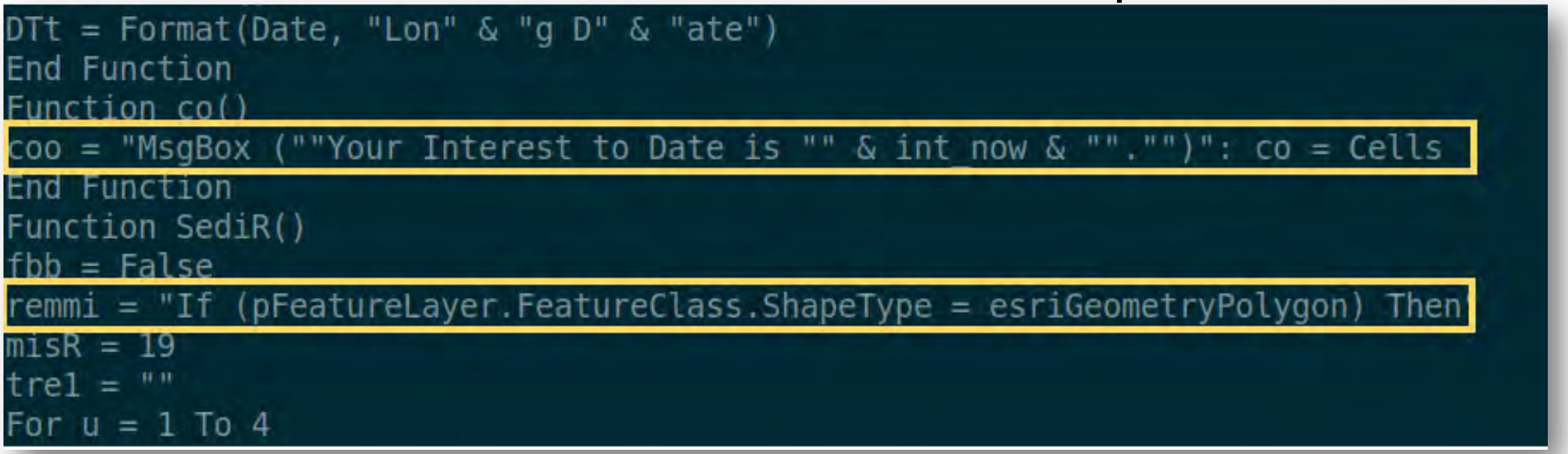
Ransomware continues to wreak havoc

- City of Riviera Beach, Florida

Nation-states

- Global conflicts and disputes have the potential to accelerate cyber attacks and espionage
- MSTIC Holmium Activity Alert
  - aka APT 33

Attackers Continue to Evolve Techniques



```
DTt = Format(Date, "Lon" & "g D" & "ate")
End Function
Function co()
coo = "MsgBox (""Your Interest to Date is "" & int_now & ""."")": co = Cells
End Function
Function SediR()
fbb = False
remmi = "If (pFeatureLayer.FeatureClass.ShapeType = esriGeometryPolygon) Then"
misR = 19
tre1 = ""
For u = 1 To 4
```

VBA crafted to evade ML classification engines

Evolving Security with Cloud

The intelligent, connected cloud introduces both opportunity and risk

81%

of hacking breaches leverage stolen/ weak passwords

Verizon 2017 Data Breach Investigation Report

1,181

cloud apps in the avg. large enterprise, 61% is shadow IT.

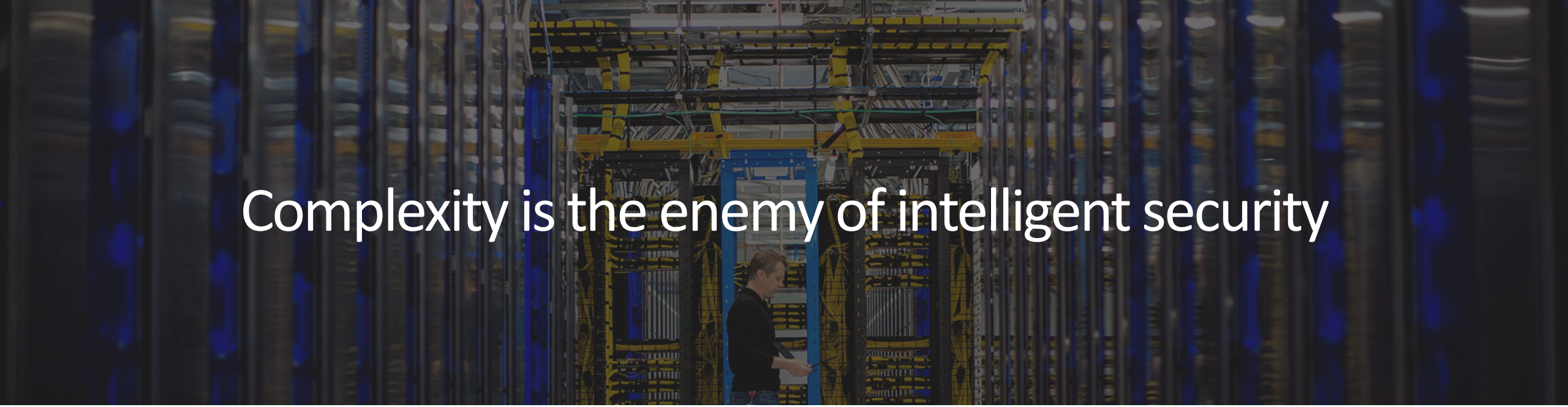
Microsoft 2018

90%

of the world's data has been created in the last two years

IBM Marketing Cloud, "10 Key Marketing Trends For 2017"

TECHNOLOGY HAS CHANGED THE WAY WE DO BUSINESS. PROTECTING COMPANY ASSETS REQUIRES A NEW APPROACH.



Complexity is the enemy of intelligent security

70 Security products from **35** Security vendors

Is the average for companies with over 1,000 employees

Nick McQuire, VP Enterprise Research CCS Insight.

$1.37M

On average that an organization spends annually in time wasted responding to erroneous malware alerts

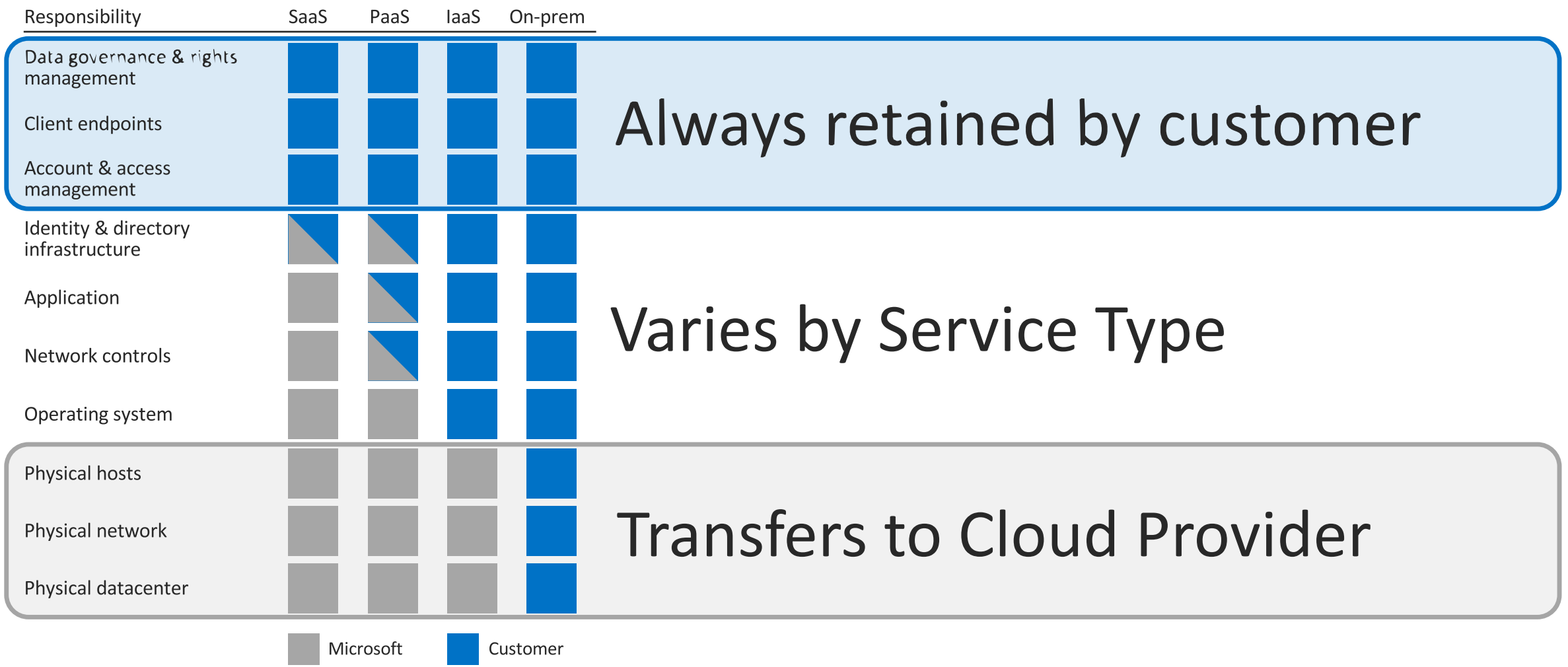
"The Cost of Insecure Endpoints" Ponemon Institute© Research Report, June 2017

1.87M

Global cybersecurity workforce shortage by 2022

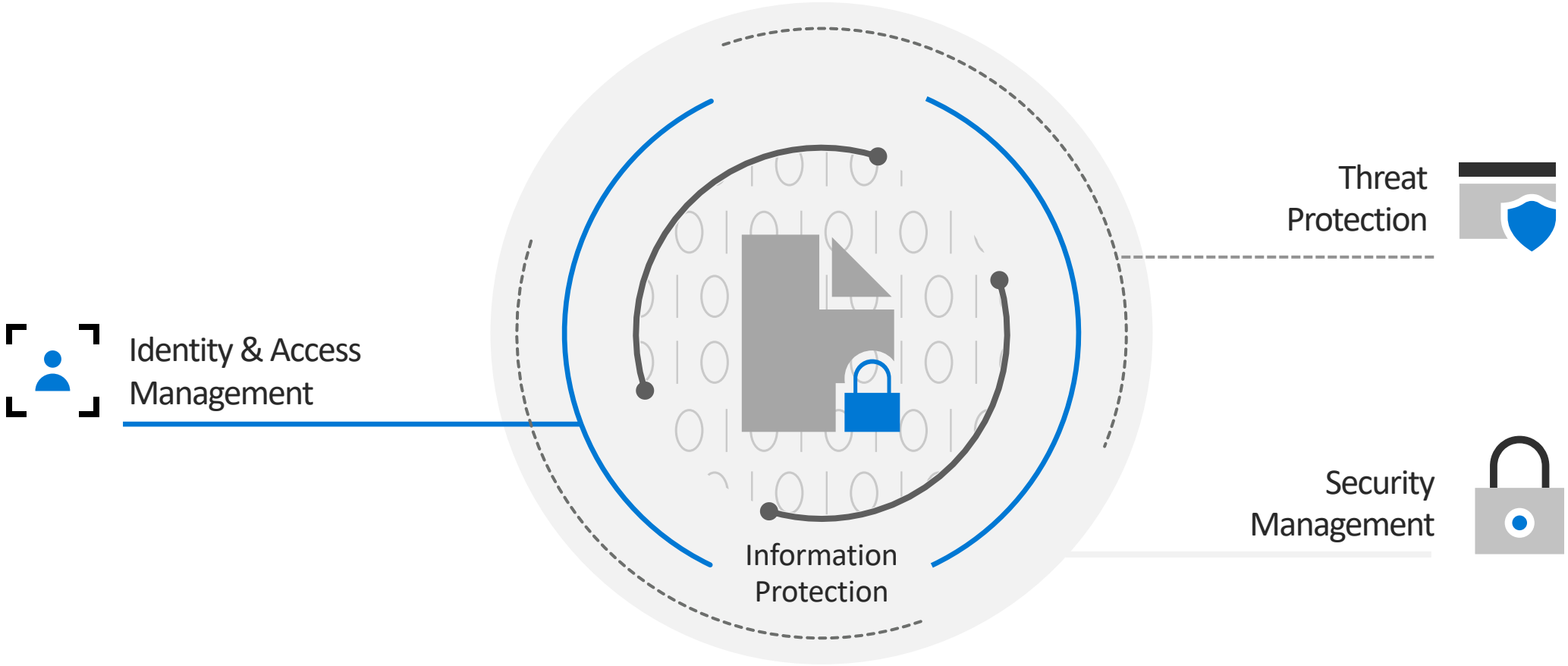
Global Information Security Workforce Study 2017

Cloud Redefines Security Responsibilities



The ‘best-of-breed’ model is broken

- Complex and expensive integration
- Constant training on new tools
- Too many alerts to handle
- Gaps in visibility

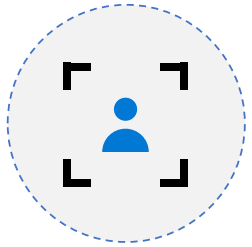


Data is your most important company asset

Correlate threat information and automatically respond

Optimize with security insights and configuration tools

Intelligent security for the modern workplace



Identity & Access Management

Secure identities to reach zero trust

Threat Protection

Help stop damaging attacks with integrated and automated security

Information Protection

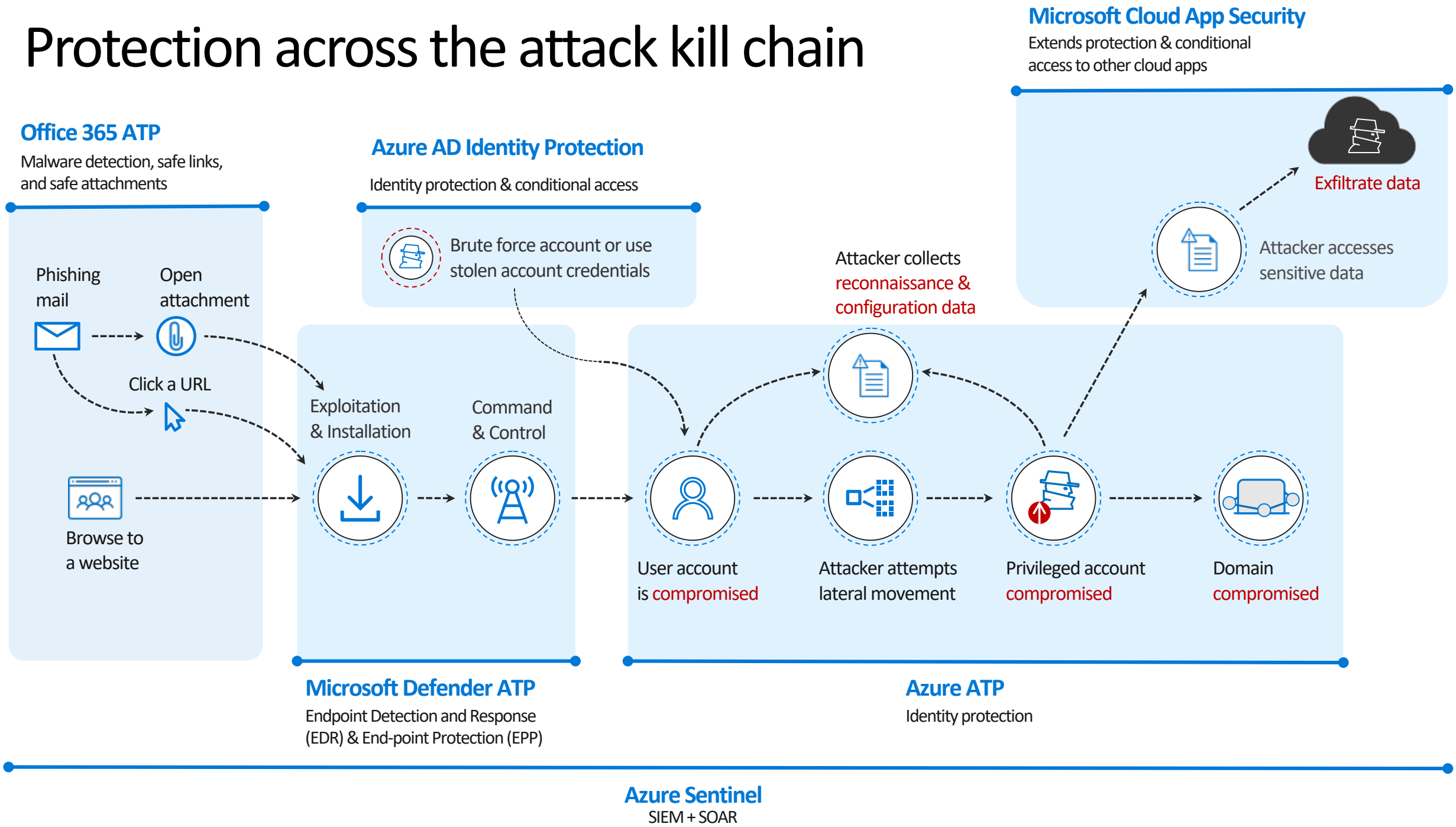
Protect sensitive information anywhere it lives

Security Management

Strengthen your security posture with insights and guidance

Holistic security across your digital landscape

Protection across the attack kill chain



Demo

Session takeaways

- **Phishing** continues to be the primary method for gaining a foothold by attackers
- A significant portion of attacks involve the **use of compromised credentials**, or successful **attacks against weak passwords**
- Breaches continue to **take months to identify**
- **Lack of trained and qualified security professionals** requires a strategy shift
- Subscribe to and regularly read the **MSFT Security Blog** and **MSFT threat intel**
- **Best of Breed** model is broken – must shift to cloud platform solutions.

Thank You!!!