Notes from the field

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CYBER SECURITY MALTA
Digital Security Your Priority

What we will cover

- Quick Refresher
- What sensors are seeing
- What cybersecurity consultants are seeing (Redacted)
- Take-home lessons
- Where to start

QUICK REFRESHERS

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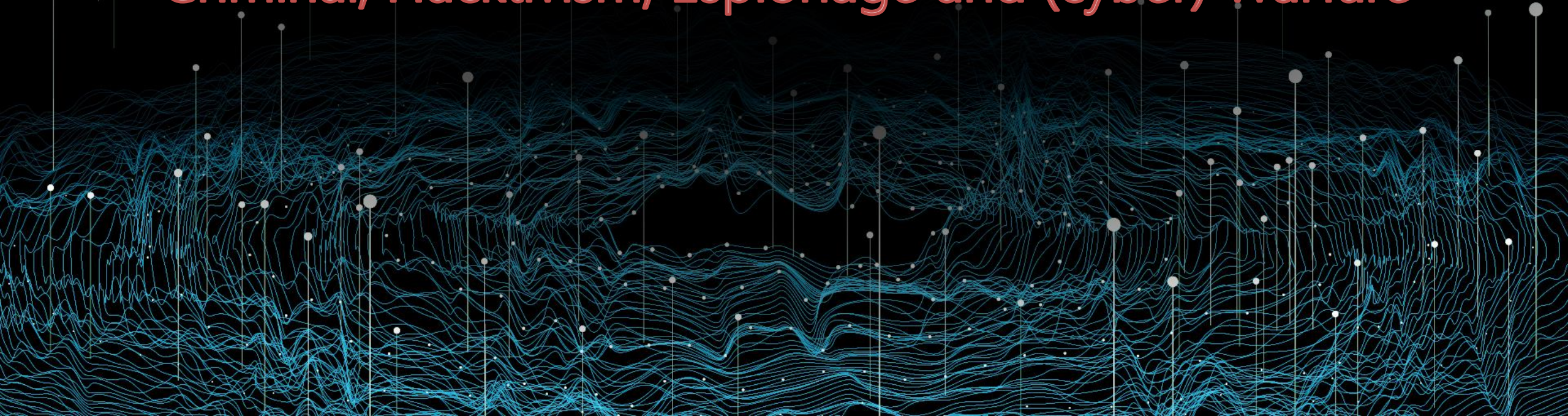
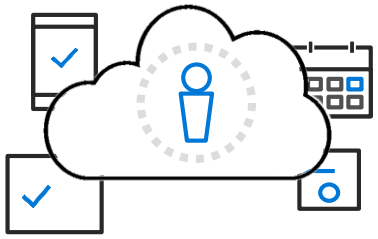
The world is changing…are you prepared?

CHEW

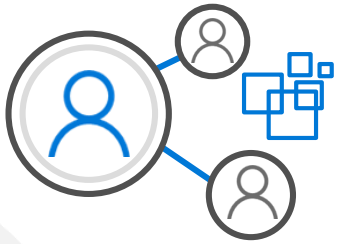
Criminal, Hacktivism, Espionage and (cyber) Warfare



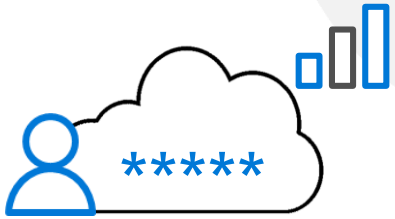
Identity is central to digital transformation – and it's where attackers focus



Seamless access across apps, groups, and devices across the organization



Collaboration and data sharing with teams and partners



IT efficiency with self-service management for passwords and access

Enhanced security and compliance with access policies

100 million
user identities attacked every month

Source: GCI blog, 4 October 2017

300% increase
in identity-based attacks reported in the last year

Source: Microsoft Security Intelligence Report, vol 22

$15 million
average cost of breach and associated business impact (plus loss of partner and customer trust, damage to reputation)

Source: GCI blog, 4 October 2017

WHAT SENSORS ARE SEEING

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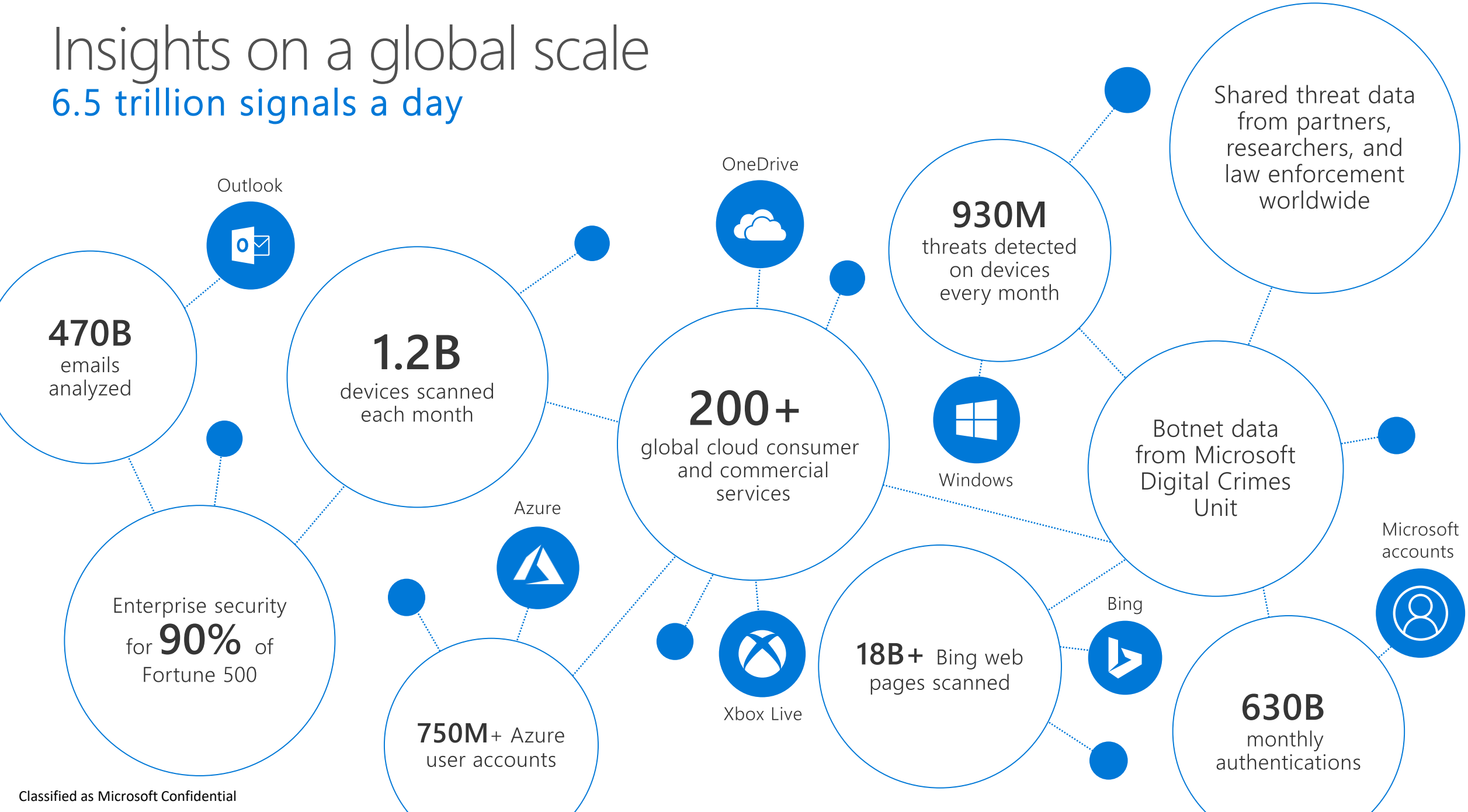
Insights on a global scale

6.5 trillion signals a day



What Sensors Are Seeing

SIR v24 identified 3 main topics

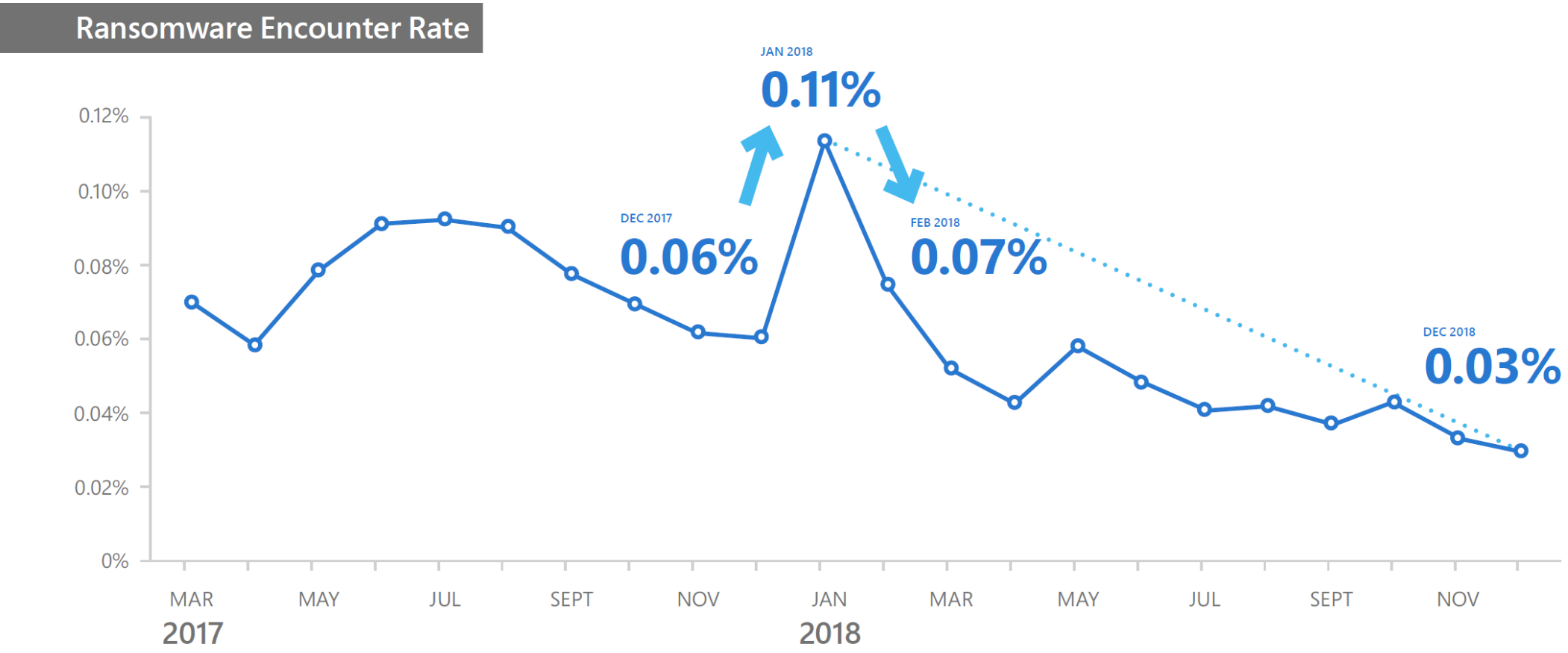
1. Ransomware vs. crypto-currency mining

2. Easy mark attack methods

3. Supply chain compromises

1. Ransomware vs. crypto-currency mining

Ransomware encounter rates **declined approximately 60%** between March 2017 and December 2018

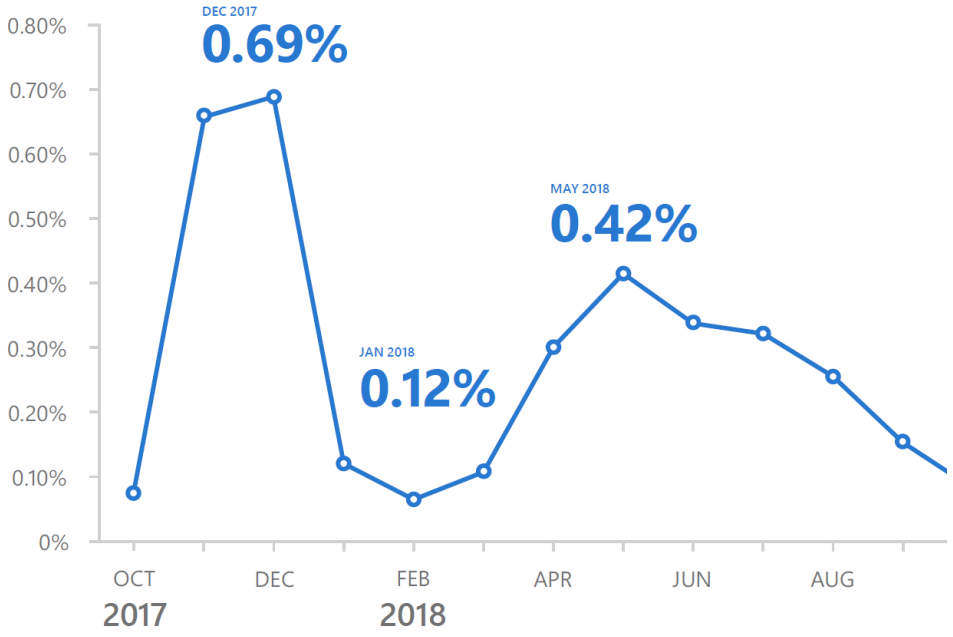


1. Ransomware vs. crypto-currency mining

Mining coins continues to be **lucrative**

Encounter **trends shift with crypto-currency prices**

Brocoiner Encounter Rate



Bitcoin prices

2. Easy mark attack methods

Phishing

Broad-based phishing and spear phishing both rely on what's most often cited as security's weakest link: people. Phishing can take many shapes, including:

Email links and attachments

Domain spoofs

User impersonation

Domain impersonation

Links to fake SaaS apps

180,000,000–200,000,000

Approximate number of phishing emails Microsoft detected each month, over three months (November 2017 - January 2018).

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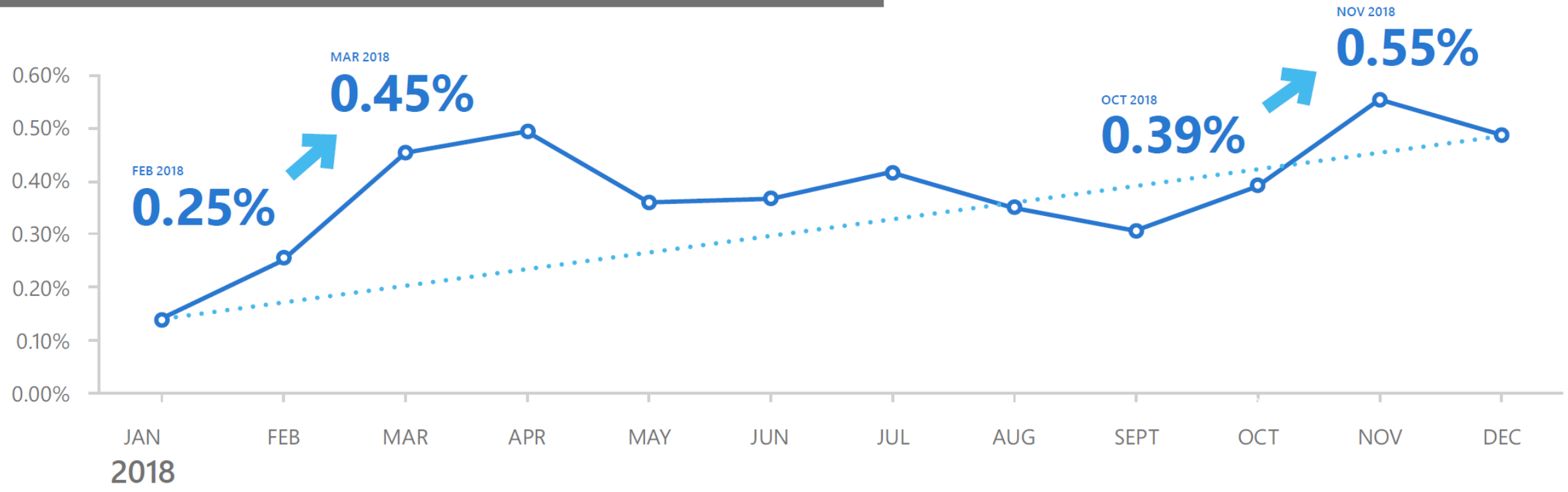
2. Easy mark attack methods

Inbound emails that were **phishing messages increased 250%** between January and December 2018

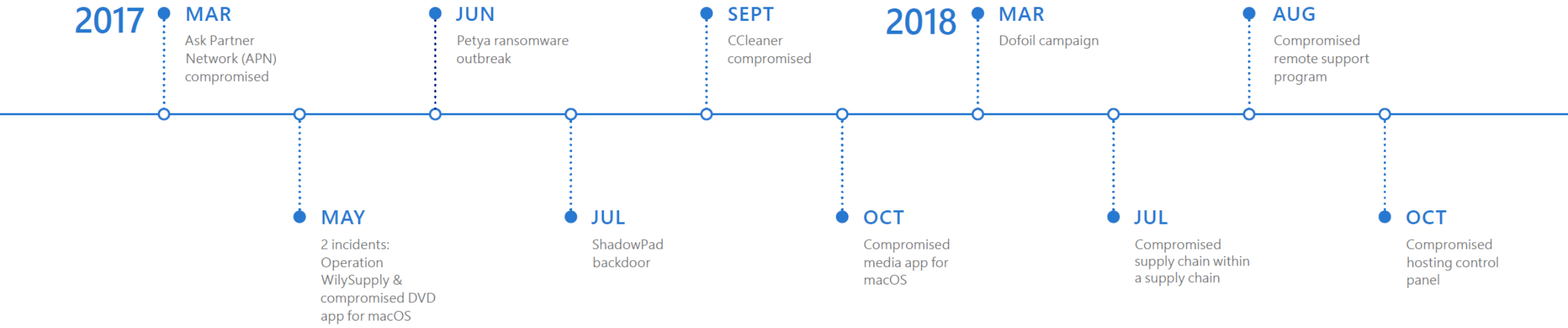
Phishing rates are still on the rise

Percentage of total inbound emails that are phishing emails



3. Supply Chain compromises

Software **supply chain attacks have been increasing** in the last few years



THIS SECTION IS REDACTED
FROM FINAL HANDOUT

WHAT CYBERSECURITY CONSULTANTS ARE SEEING

The examples used have modifications to obfuscate attacker methodology

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LESSONS LEARNED

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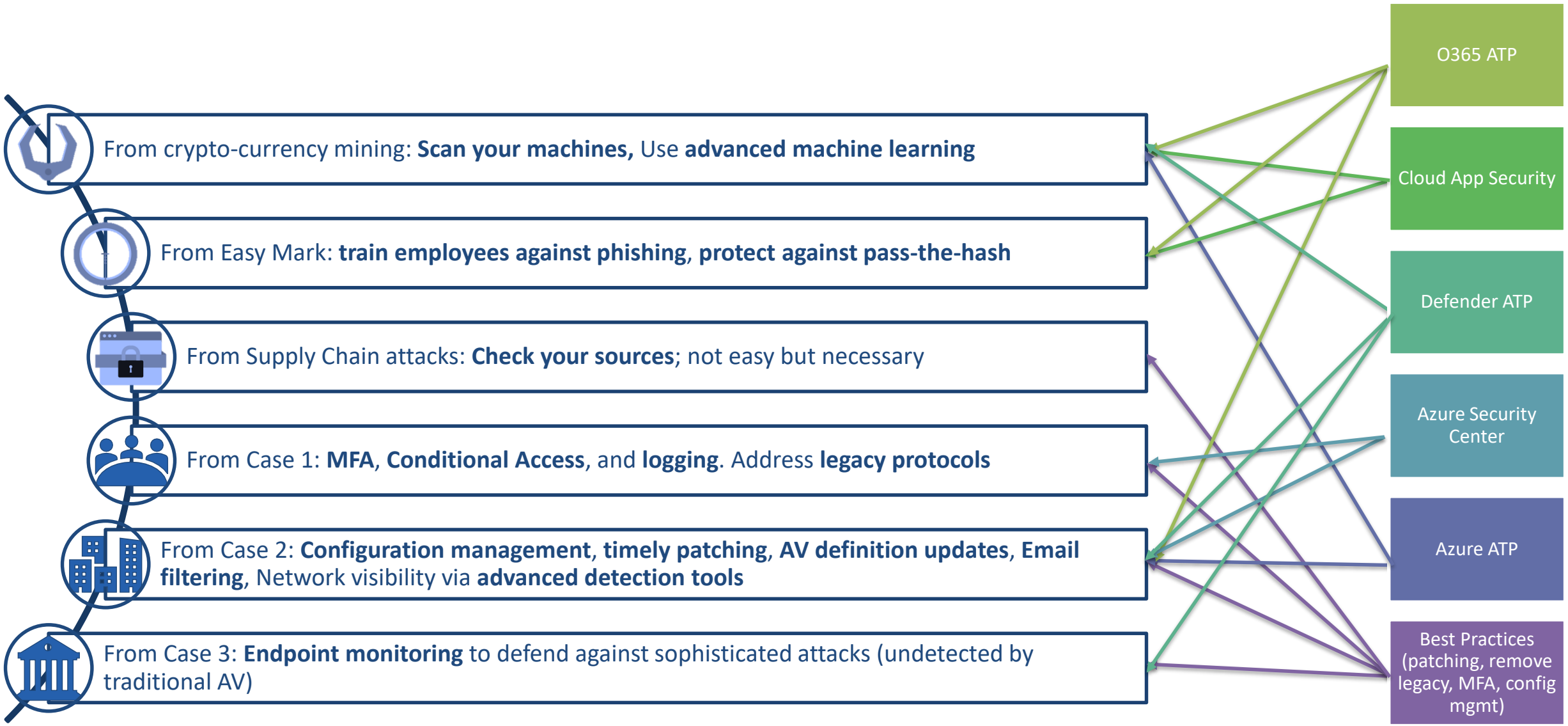
Lessons Learned (Partial list)



Basic Recommendations

- **Security hygiene is critical**
  remove legacy, perform patching, enable MFA & logging, etc.
- **Implement access controls**
  especially for sensitive/privileged roles; they have keys to the kingdom
- **Keep backups**
  warm and cold, to make ransomware irrelevant
- **Be aware and act**
  have an incident response plan in place; test it regularly
- **Stay up-to-date**
  www.microsoft.com/security/blog

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