

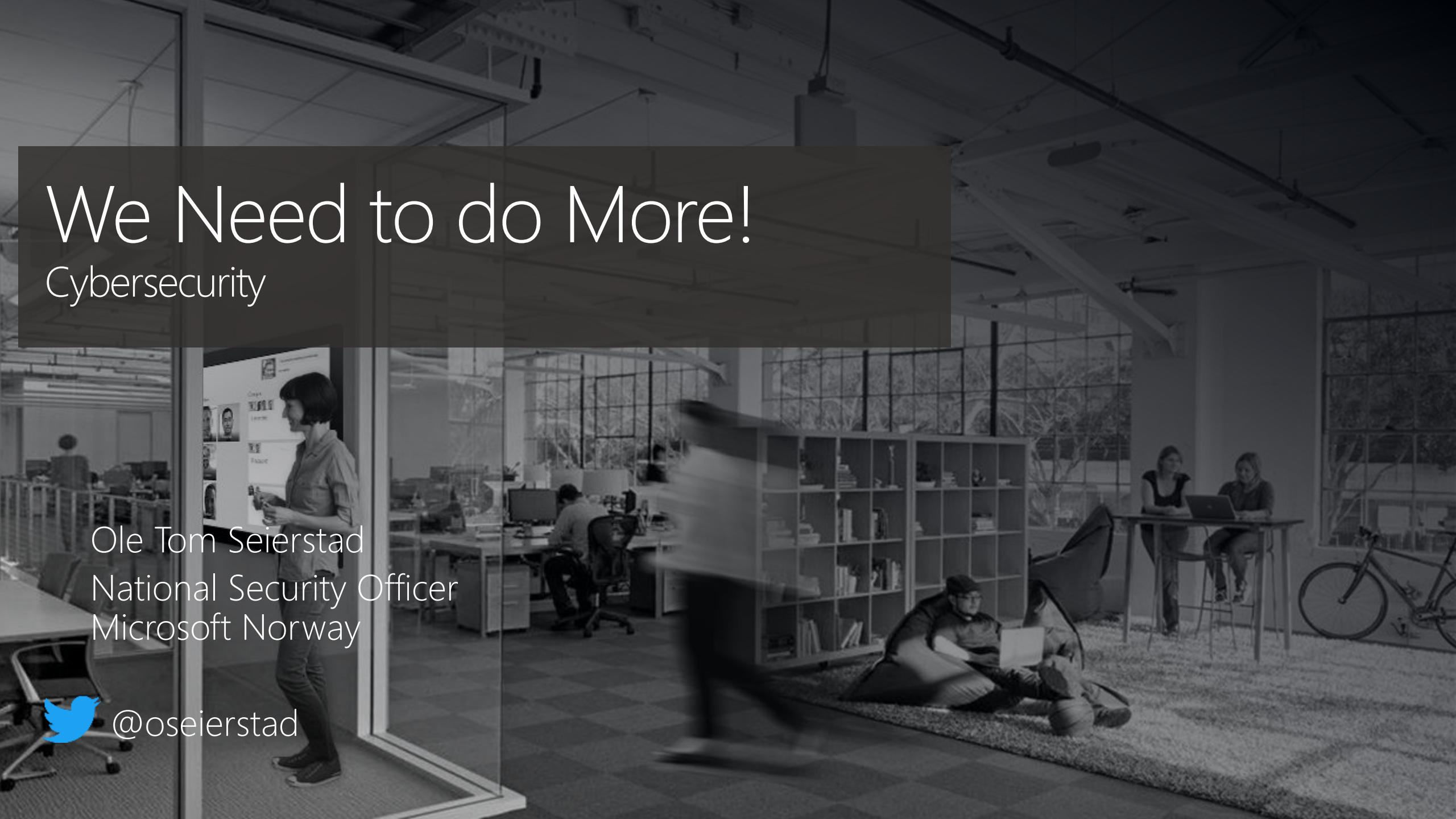
We Need to do More!

Cybersecurity

Ole Tom Seierstad
National Security Officer
Microsoft Norway



@oseierstad



CYBERSECURITY TODAY impacts us all



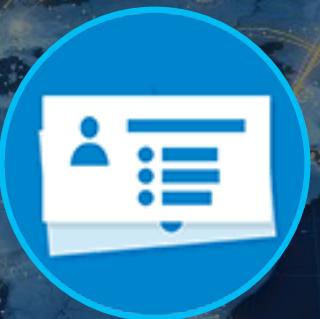
\$4 million

Average cost
of a data breach
in 2017



\$8 trillion

Estimated cost of
cybercrime to world
economy by 2022



6 billion+

Records stolen by
hackers in 2017



1 million+

New malware
variants created
each day

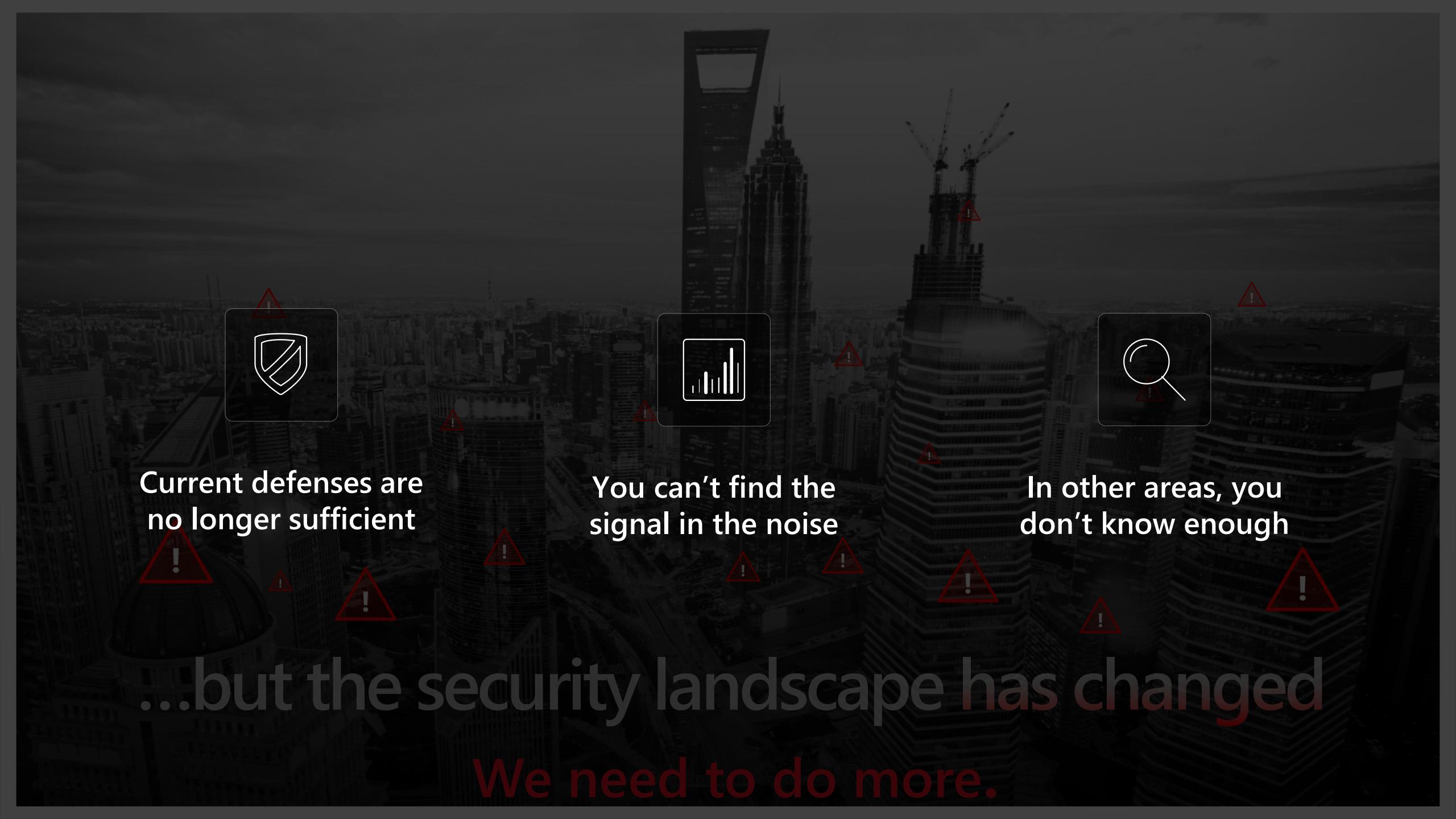


>99 days

Median # of days
between infiltration
and detection



You have many of the best security solutions...



Current defenses are
no longer sufficient

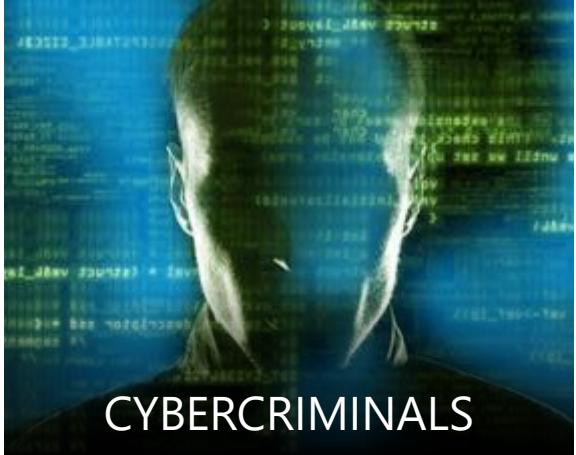
You can't find the
signal in the noise

In other areas, you
don't know enough

...but the security landscape has changed
We need to do more.

Today's top THREAT ACTORS pose unique challenges

An effective strategy must respond to a broad range of continually evolving attack types



CYBERCRIMINALS



NATION-STATE



HACKTIVISTS



INSIDERS

FINANCIAL

Persistent presence
Professional execution
Ransomware

ESPIONAGE

Near-unlimited resources
Sophistication
Legal autonomy

POLITICAL

Shape/influence opinions
Undermine trust

OPPORTUNISTIC

Access to IT environment
Trusted to access sensitive info

Attack Vectors



SOCIAL
ENGINEERING



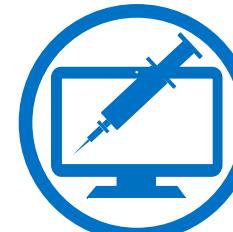
PHISHING



IDENTITY
SPOOFING



MALWARE



SUPPLY CHAIN
INSERTION



MAN-IN-THE-
MIDDLE



DENIAL OF
SERVICE

Various stages of an attack

User inserts USB drive



User opens email attachment or clicks on a URL



Exploitation of the endpoint



Attacker installs backdoor to gains persistency



Escalates privileges, steals credentials



Attackers explores the network and moves to find sensitive data



Attacker accesses sensitive data



Attacker steals sensitive data



Browse to a website



First Host Compromised

Domain Admin Compromised

Attack Discovered

Research & Preparation

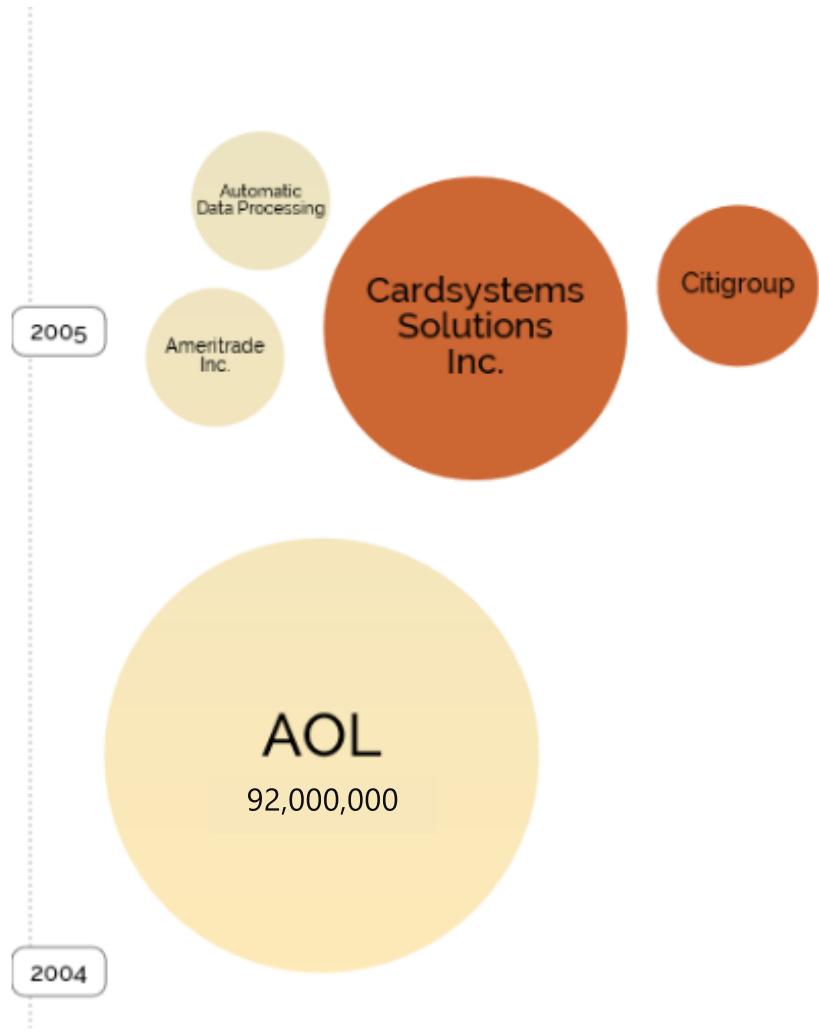
24-48 Hours

Data Exfiltration (Attacker Undetected)

11-14 months



BRIEF HISTORY OF BREACHES

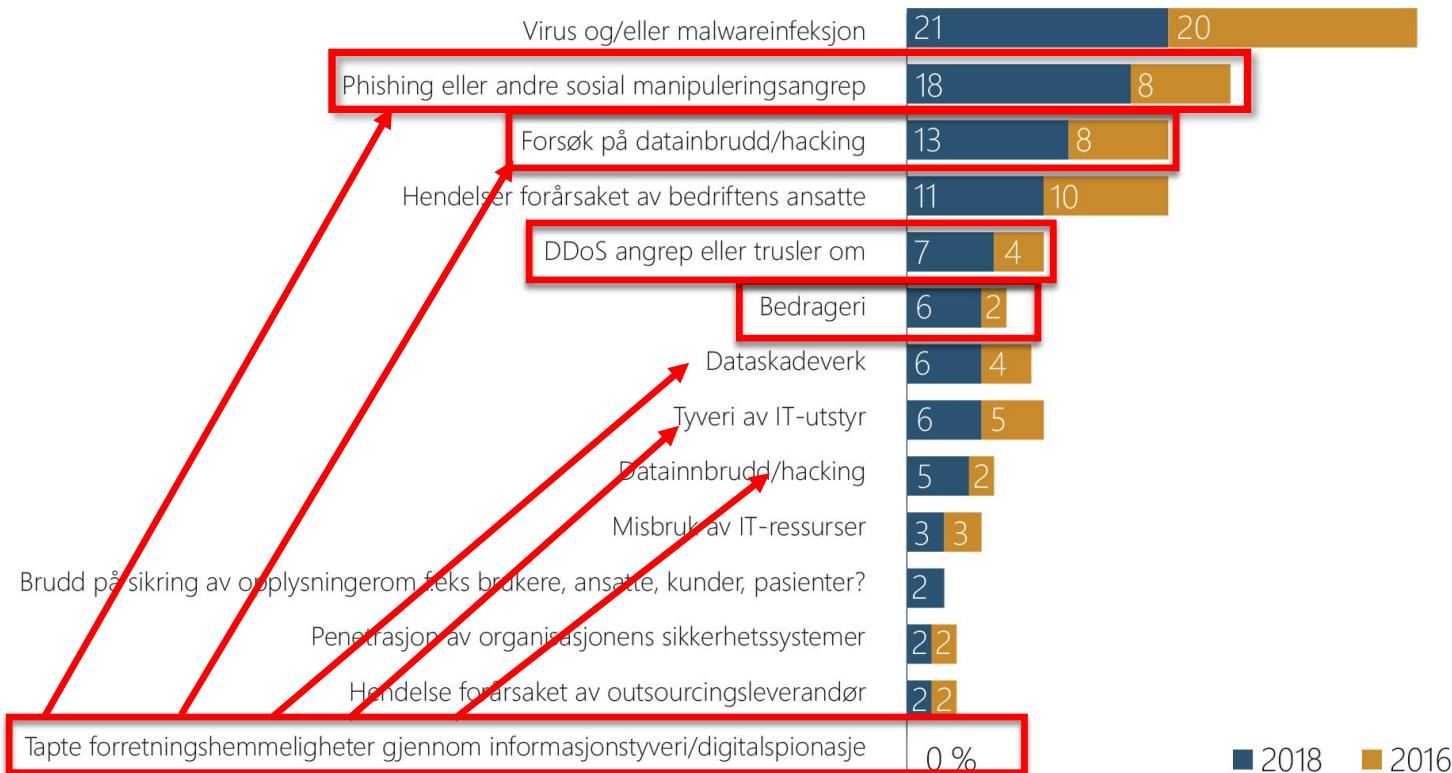




Mørketallsundersøkelsen 2018

Hendelser

Spørsmål: Jeg vil nå lese opp noen mulige informasjonssikkerhetshendelser og ber deg svare ja eller nei på om virksomheten har vært utsatt for disse i kalenderåret 2017? (n=1500)

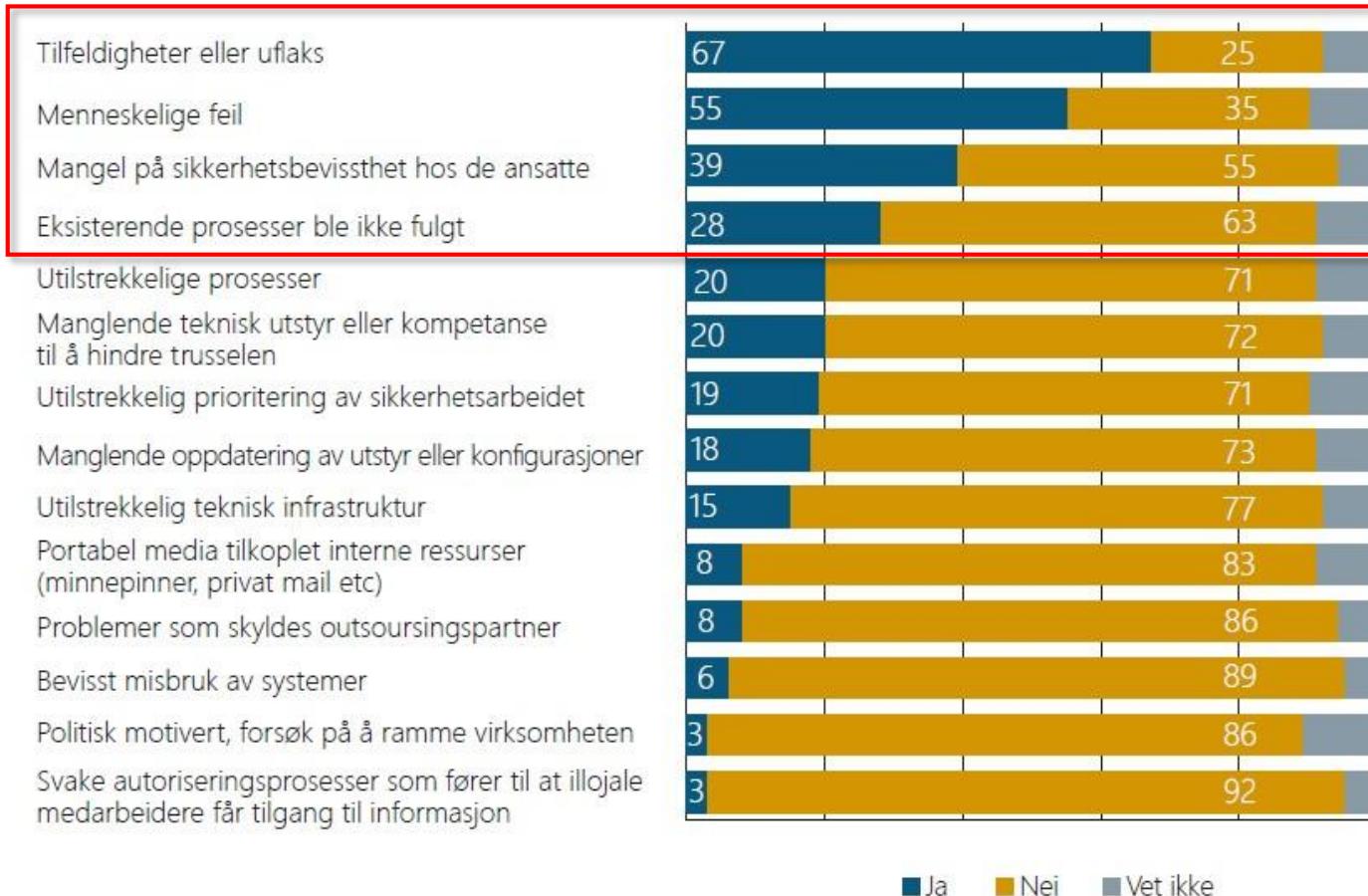


Sammenlignet med 2016 er det spesielt phishing, datainnbrudd/hacking, DDoS-angrep eller trussel om dette, samt bedrageri som har økt.

Ingen oppgir at de har tapt forretningshemmeligheter på grunn av digital spionasje.

Årsaker

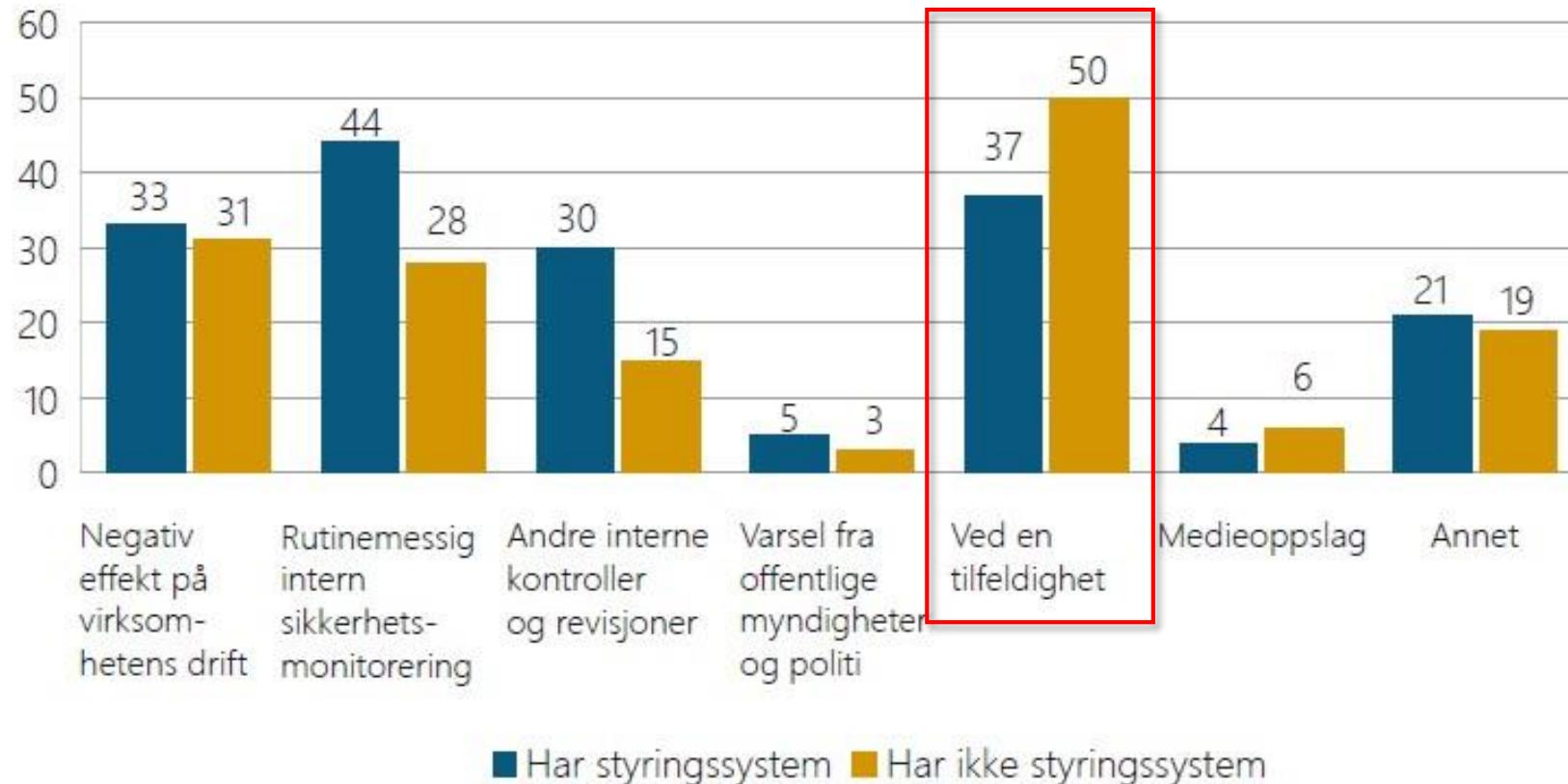
Spørsmål: Var noen av følgende faktorer årsak til at sikkerhetsbruddet **oppsto**?



Blant de som har opplevd hendelser er det 67 prosent som mener årsaken var tilfeldigheter eller uflaks, mens over halvparten også tilskriver sikkerhetsbruddet menneskelige feil.

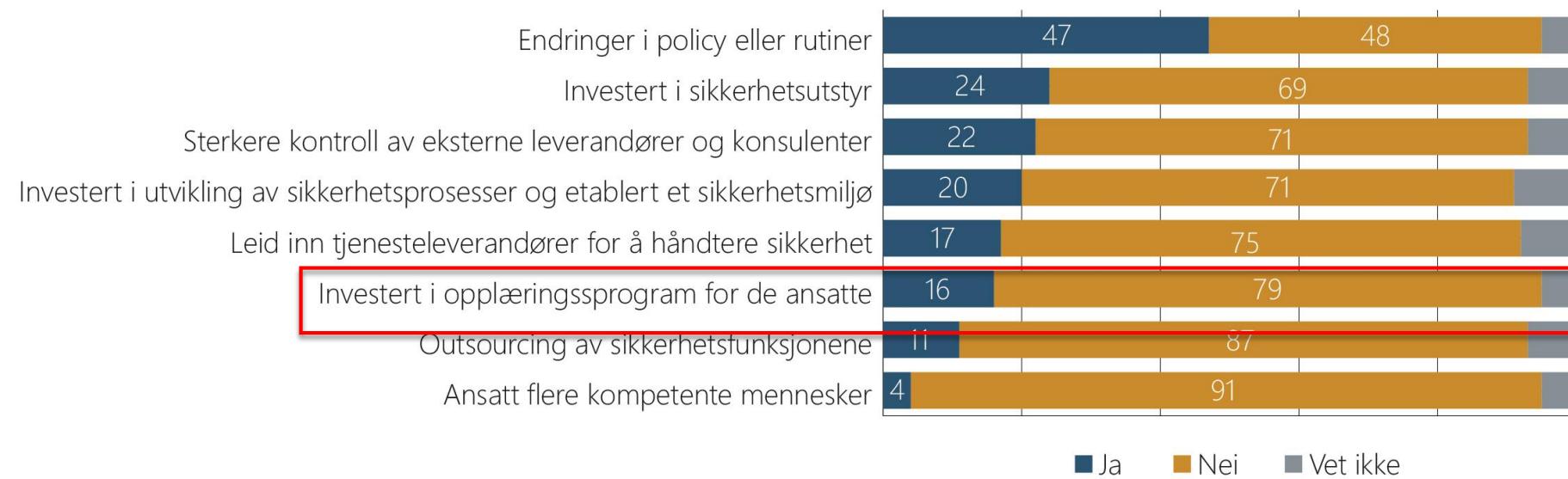
Dette er en nedgang fra 2016.

Årsaker



Følger og håndtering

Spørsmål: Som et resultat av hendelsen, ble noen av følgende endringer gjort i organisasjonen?



De store virksomhetene har i større grad investert i opplæring for de ansatte. Virksomheter som har et styringssystem for informasjonssikkerhet har i større grad enn andre investert i utvikling av sikkerhetsprosesser og etablert et sikkerhetsmiljø.

Dette til tross for at menneskelige feil oppgis til én av hovedårsakene til at hendelsen oppstod.

30 millioner

1,3 milliarder

PROTECT

Defense-in-Depth

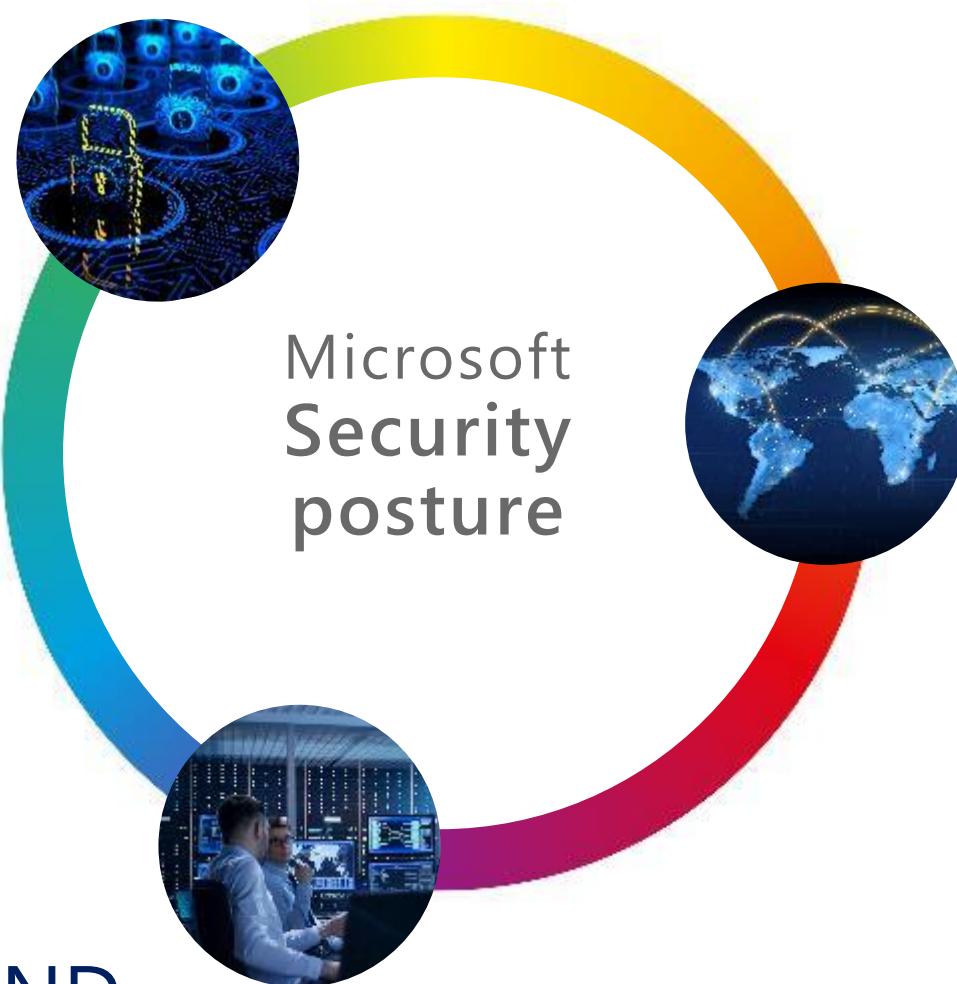
Monitoring and controls

Identity and Access management

Proper hygiene

Security Development Lifecycle

Data encryption



RESPOND

Closing the gap between
discovery and action

DETECT

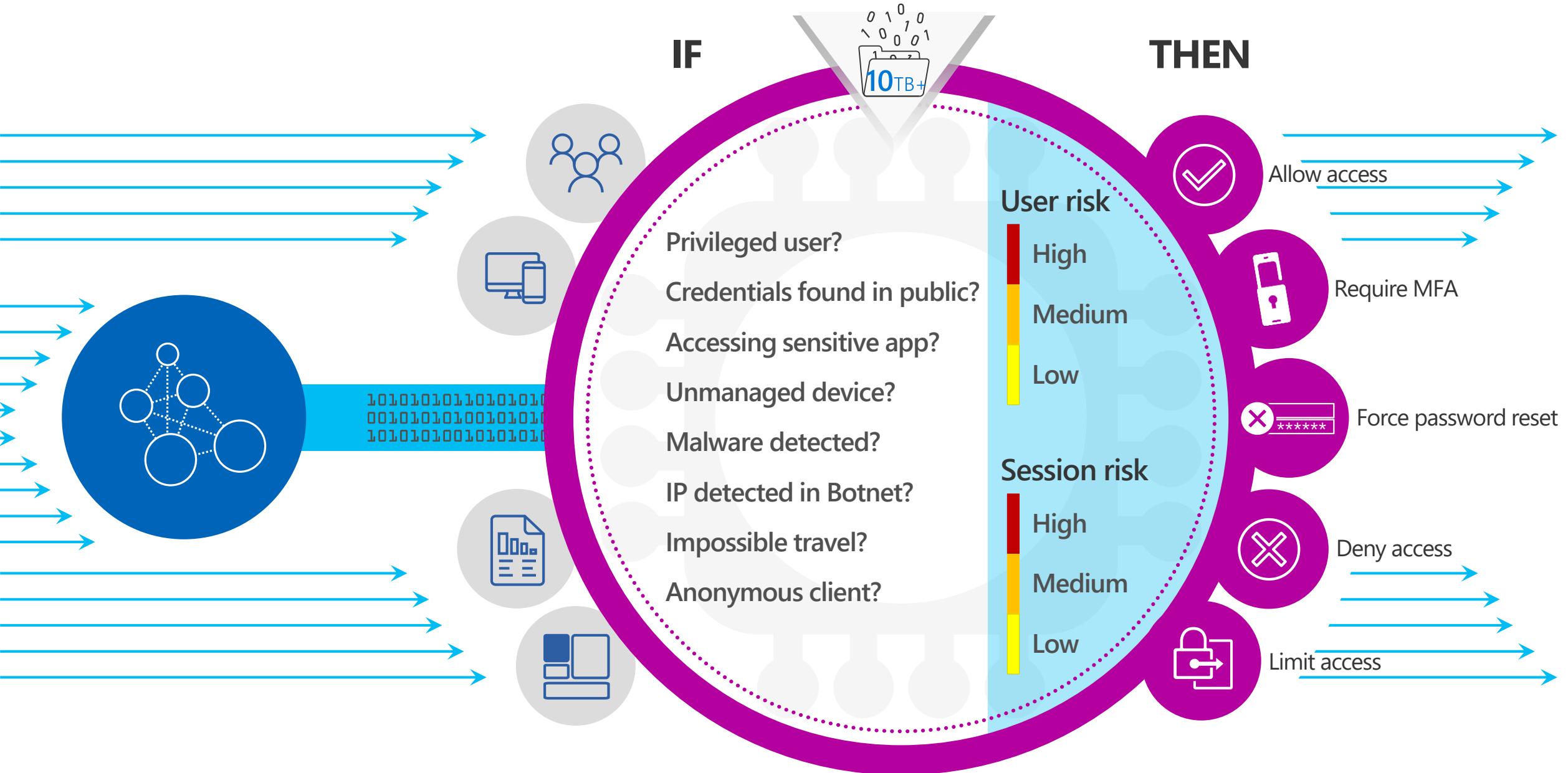
Extensive signal fabric

Cloud scale intelligence

Machine learning

Behavioral monitoring

CLOUD-POWERED CONDITIONAL ACCESS





Thank You!



@oseierstad

