
INNOVATION & TECHNOLOGY
SUMMIT
2017

REVISION 004 / UPDATED 26 APRIL 2017

DEFENDING THE ACADEMY FROM CYBER THREATS

INNOVATION & TECHNOLOGY SUMMIT

UT DALLAS – 16 MAY 2017

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Consulting SE – Global Pursuit Specialist

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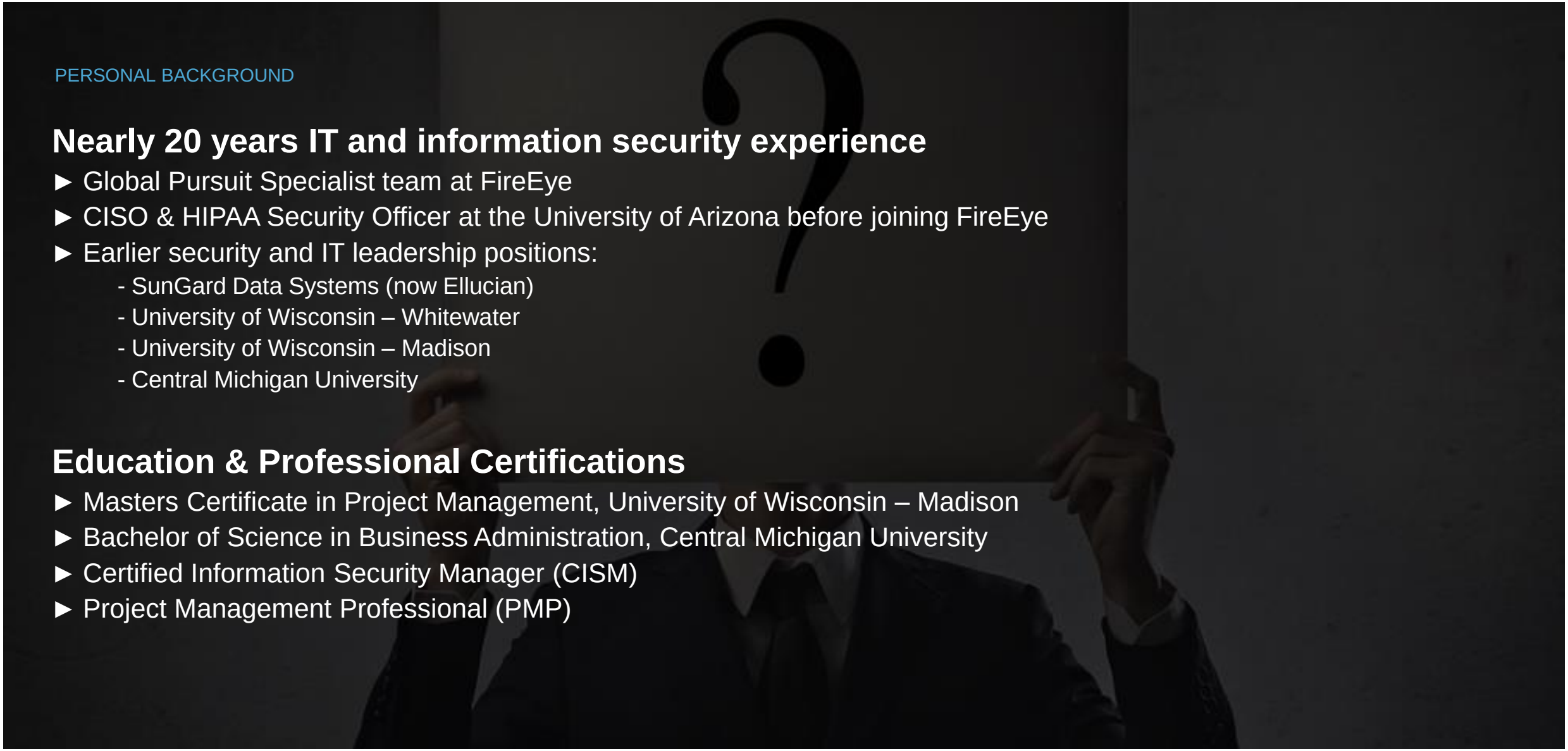
SECURITY REIMAGINED



PERSONAL BACKGROUND

Nearly 20 years IT and information security experience

- Global Pursuit Specialist team at FireEye
- CISO & HIPAA Security Officer at the University of Arizona before joining FireEye
- Earlier security and IT leadership positions:
  - SunGard Data Systems (now Ellucian)
  - University of Wisconsin – Whitewater
  - University of Wisconsin – Madison
  - Central Michigan University

Education & Professional Certifications

- Masters Certificate in Project Management, University of Wisconsin – Madison
- Bachelor of Science in Business Administration, Central Michigan University
- Certified Information Security Manager (CISM)
- Project Management Professional (PMP)

NON-IT LEADERS ARE BECOMING MORE AWARE OF CYBER THREATS

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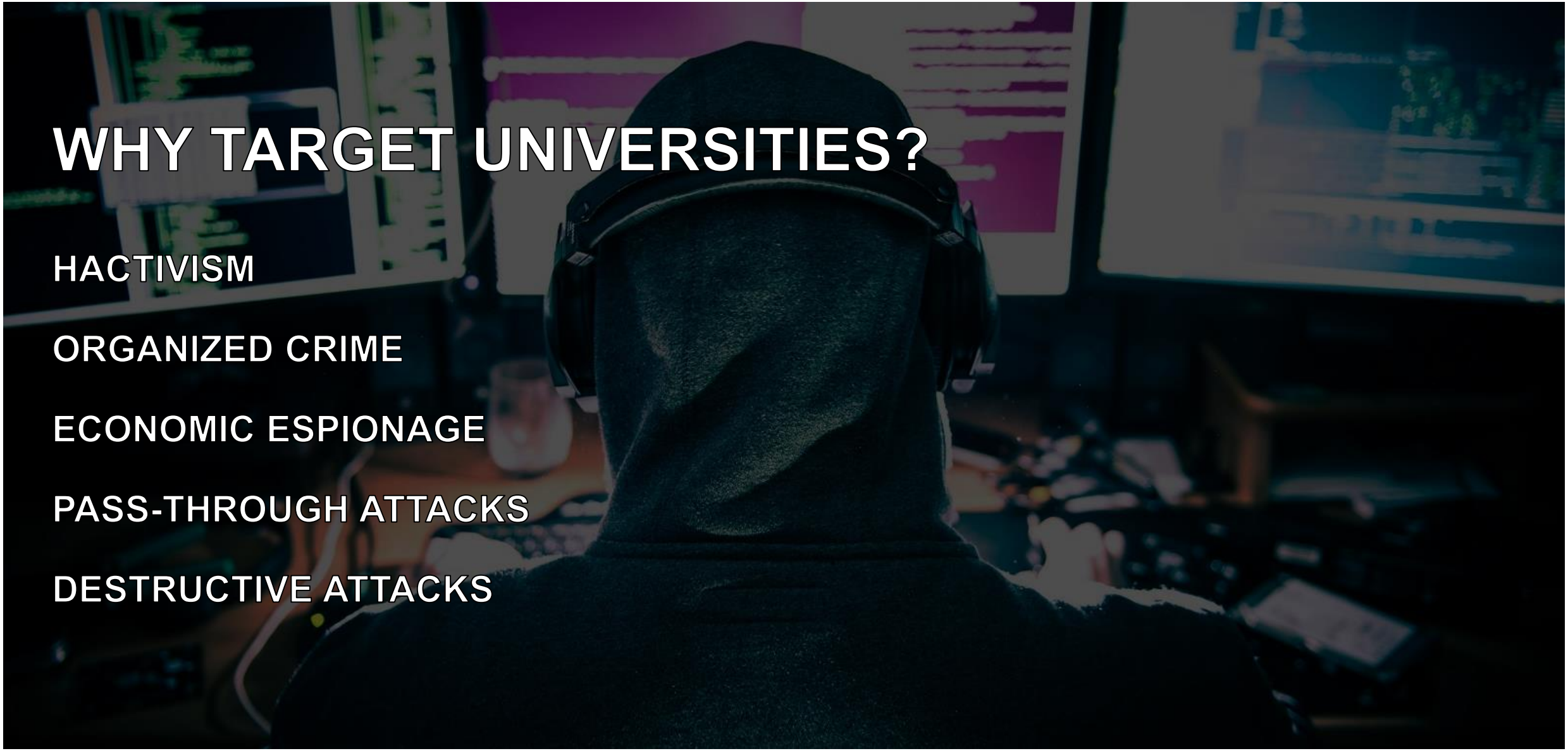

WHY TARGET UNIVERSITIES?

HACTIVISM

ORGANIZED CRIME

ECONOMIC ESPIONAGE

PASS-THROUGH ATTACKS

DESTRUCTIVE ATTACKS

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DEFENSE-IN-DEPTH AIMS TO PREVENT ATTACKS

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FIREEYE. MAGINOT REVISITED: MORE REAL-WORLD RESULTS FROM REAL-WORLD TESTS. 2015.

PREVENTION IS NOT ENOUGH

STUDIED 1600+ ORGANIZATIONS, INCLUDING MORE THAN 100 EDUCATION INSTITUTIONS

100% OF EDUCATION INSTITUTIONS COMPROMISED DURING TEST PERIOD

37% HAD EVIDENCE OF ADVANCED ATTACKS

YOU NEED TO HUNT FOR INTRUDERS THAT ARE ALREADY INSIDE

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WHY? CYBERSECURITY THREATS ARE ASYMMETRIC

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YOU NEED A STRATEGY THAT GOES BEYOND PREVENTING ATTACKS

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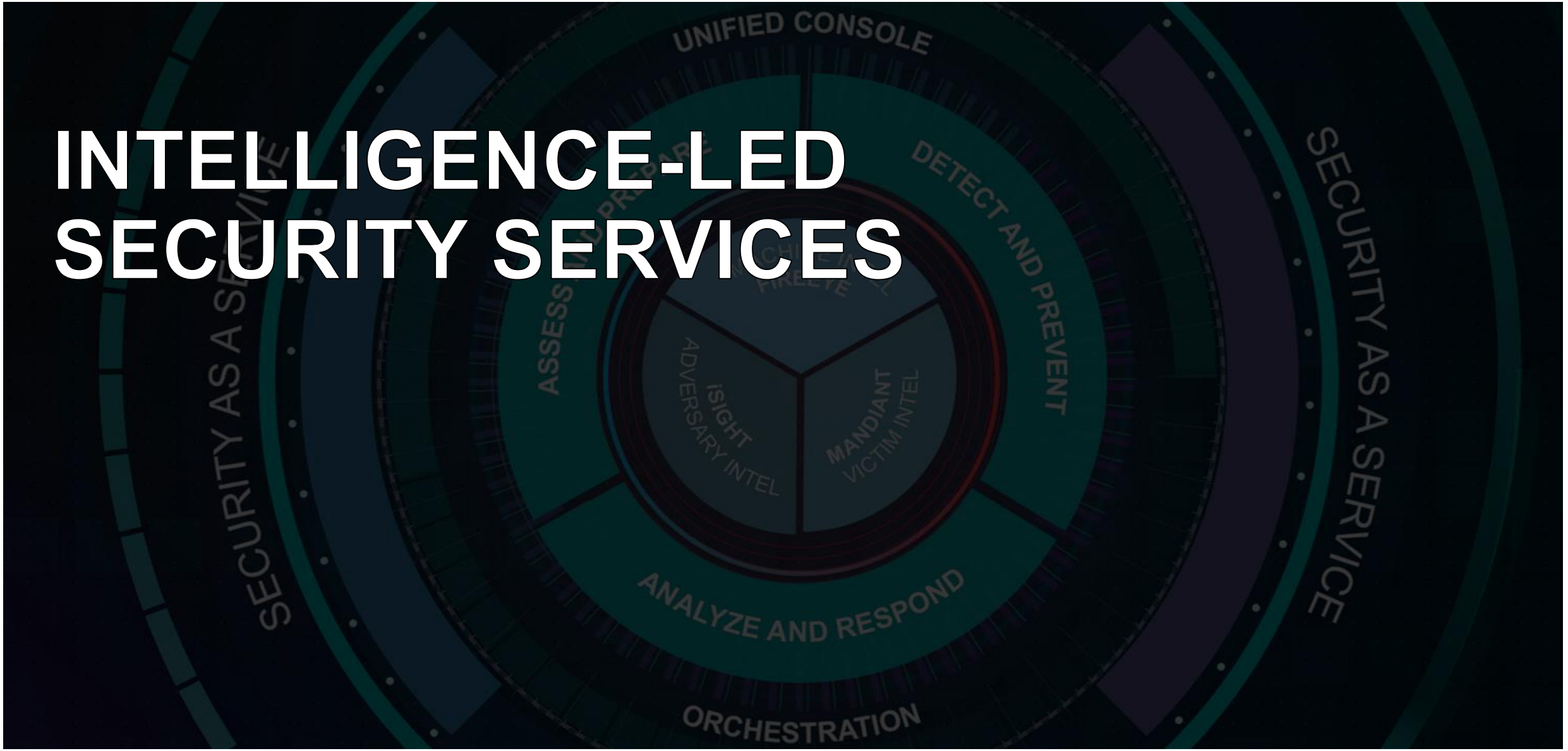
INTELLIGENCE-LED SECURITY SERVICES



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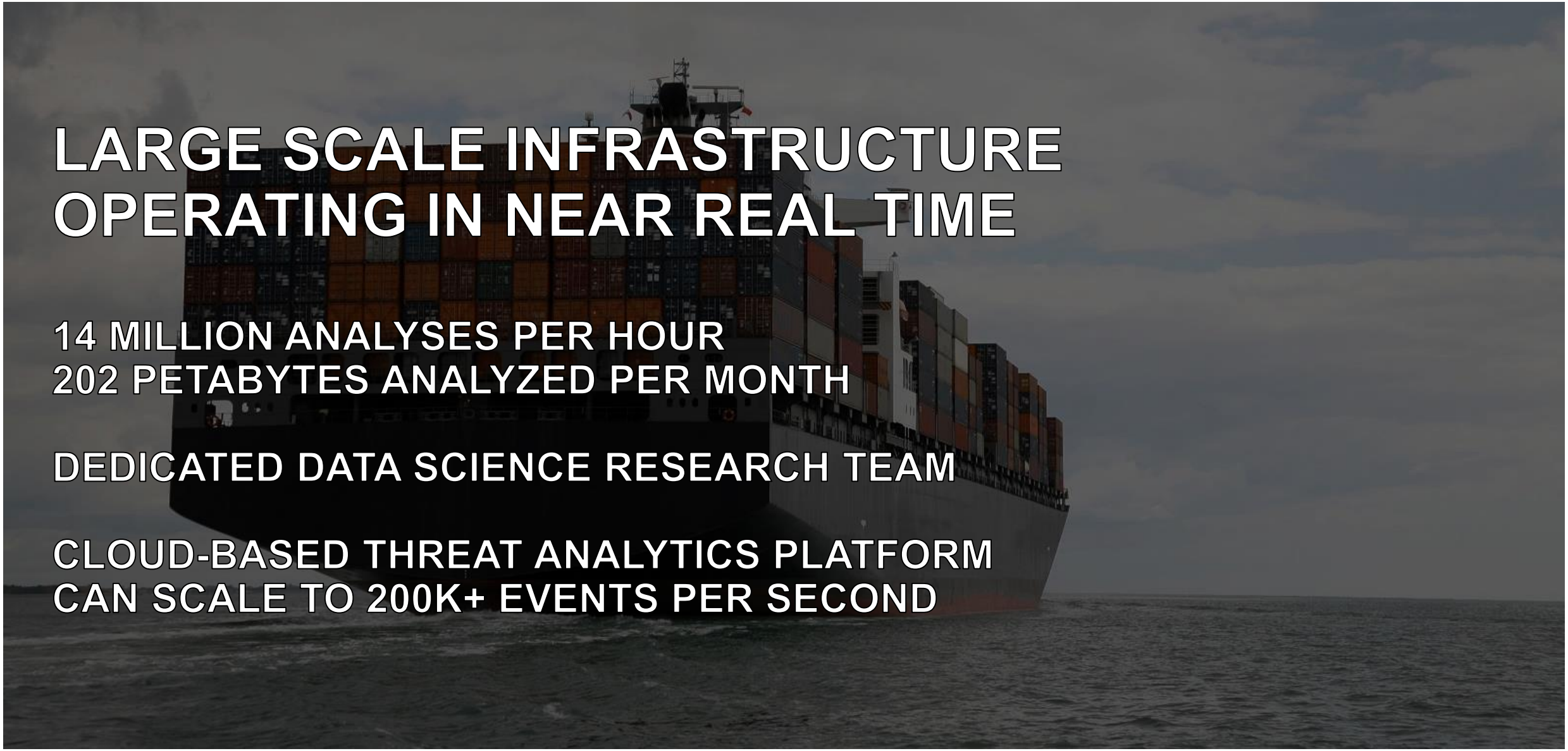

LARGE SCALE INFRASTRUCTURE OPERATING IN NEAR REAL TIME

14 MILLION ANALYSES PER HOUR
202 PETABYTES ANALYZED PER MONTH

DEDICATED DATA SCIENCE RESEARCH TEAM

CLOUD-BASED THREAT ANALYTICS PLATFORM
CAN SCALE TO 200K+ EVENTS PER SECOND

GLOBAL VISIBILITY INTO MACHINE, VICTIM, AND ADVERSARY INTELLIGENCE

15 MILLION SENSORS IN 89 COUNTRIES
200,000+ INCIDENT RESPONSE HOURS PER YEAR
1000+ SECURITY AND INTELLIGENCE EXPERTS

PROTECT MORE THAN 65% OF THE FORTUNE 500 AND HUNDREDS OF GOVERNMENT, EDUCATION, AND NON-PROFITS

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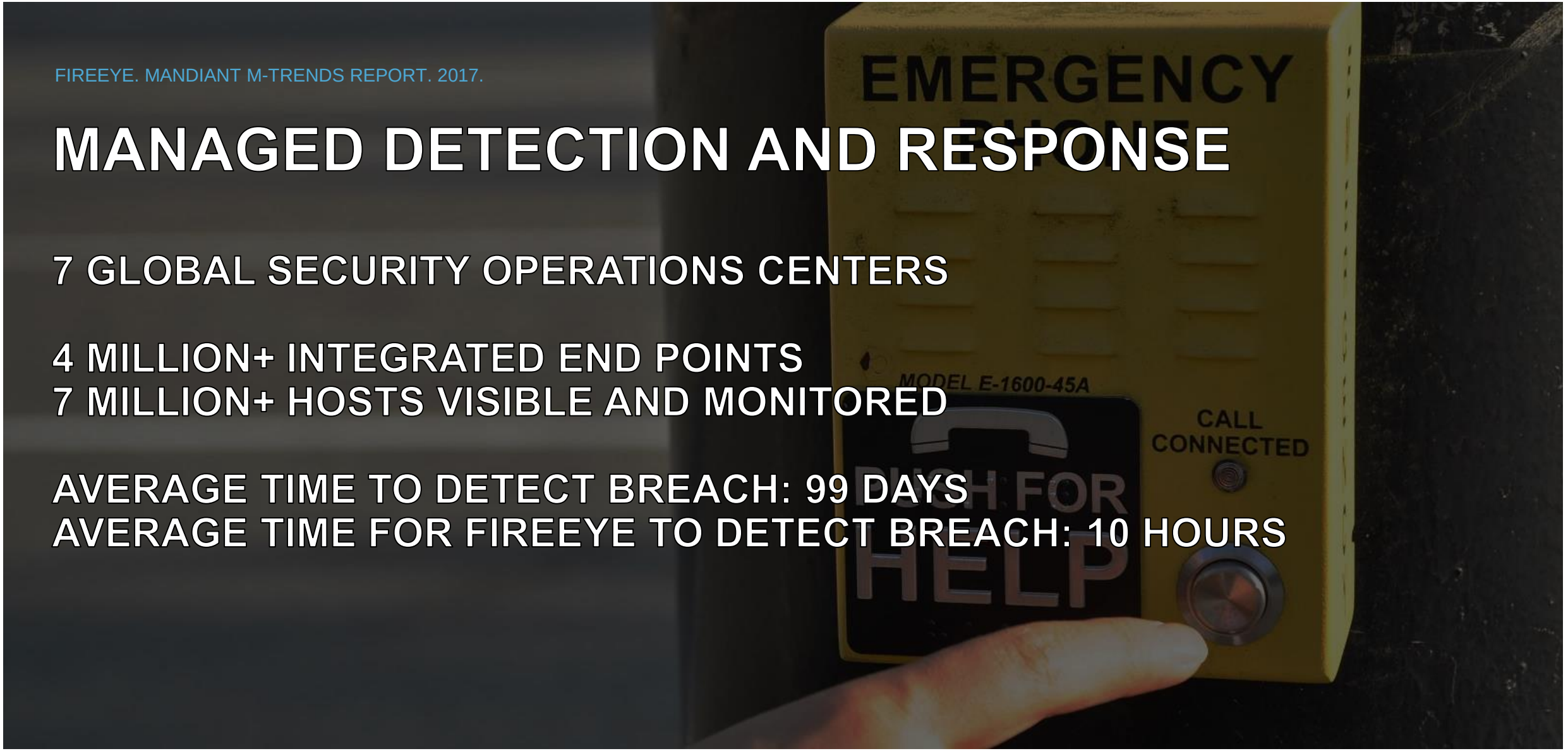
TIMELY & RELEVANT THREAT INTELLIGENCE

FIREEYE TRACKS MORE THAN 16,000 THREATS

174 MILLION NODE GRAPH DATABASE
583 MILLION CORRELATION RELATIONSHIPS

UPDATES DISTRIBUTED IN UNDER AN HOUR TO PROTECT ALL CUSTOMERS GLOBALLY

MANAGED DETECTION AND RESPONSE



7 GLOBAL SECURITY OPERATIONS CENTERS

4 MILLION+ INTEGRATED END POINTS
7 MILLION+ HOSTS VISIBLE AND MONITORED

AVERAGE TIME TO DETECT BREACH: 99 DAYS
AVERAGE TIME FOR FIREEYE TO DETECT BREACH: 10 HOURS

CUSTOMERS BENEFIT FROM INTELLIGENCE-LED SECURITY

CONFIDENCE WITH <1% FALSE POSITIVES

RESPONSE TIME REDUCED BY 95%

>90% CUSTOMER RENEWAL RATE

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HOW CAN YOU IMPROVE YOUR CYBER RESILIENCE?

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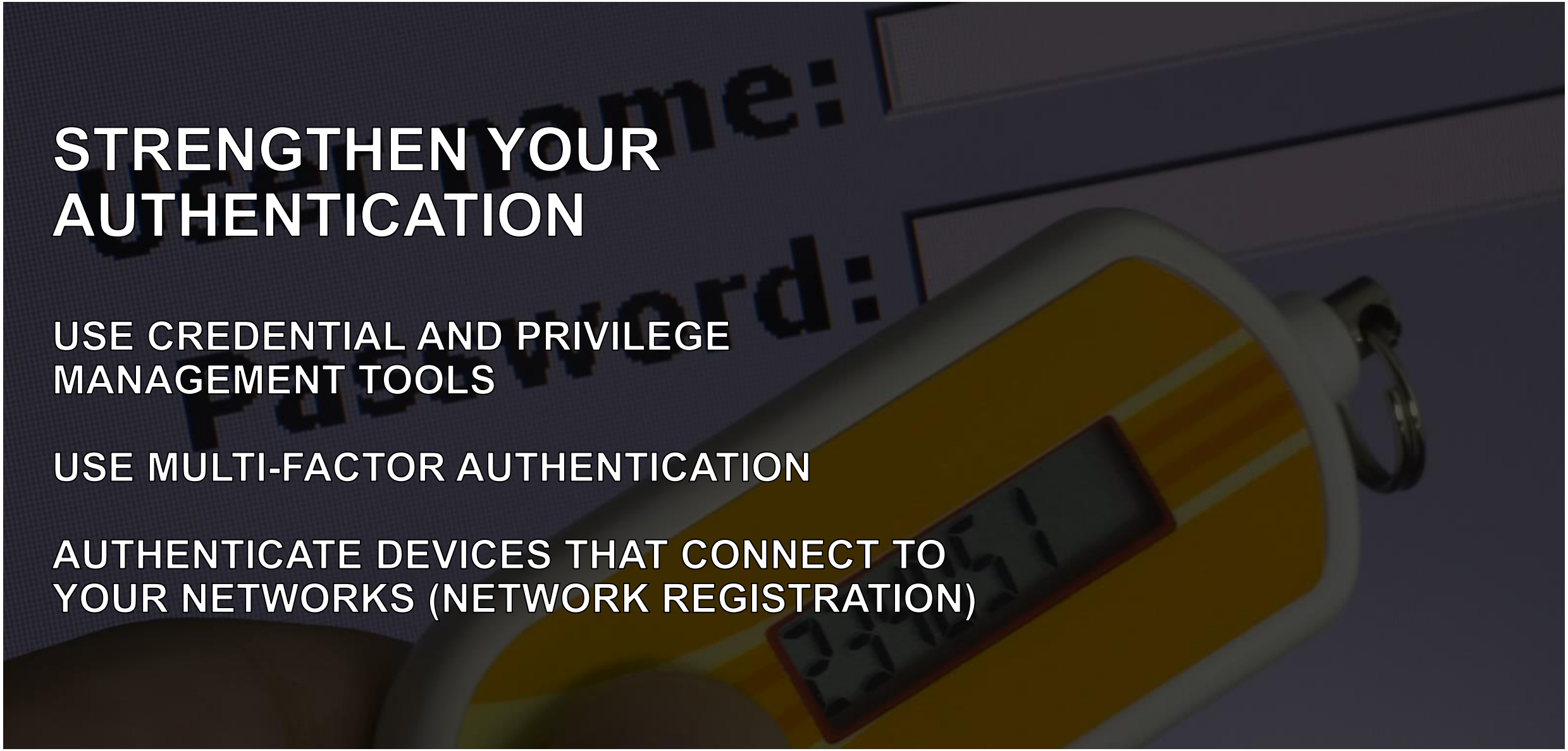

STRENGTHEN YOUR AUTHENTICATION

USE CREDENTIAL AND PRIVILEGE MANAGEMENT TOOLS

USE MULTI-FACTOR AUTHENTICATION

AUTHENTICATE DEVICES THAT CONNECT TO YOUR NETWORKS (NETWORK REGISTRATION)

STRENGTHEN YOUR ARCHITECTURE

SEPARATE WHAT'S TRULY PUBLIC FROM WHAT SHOULD BE INTERNAL

RISK-BASED NETWORK SEGMENTATION

ROLE-BASED DATA SEGREGATION

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IMPLEMENT PROCESSES AND TOOLS TO HUNT FOR THREATS

MALWARE SANDBOXING, CYBER THREAT INTELLIGENCE, SIEM & DATA ANALYTICS

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FIREEYE. MANDIANT M-TRENDS REPORT. 2015.

EXTEND YOUR VISIBILITY

46% OF COMPROMISES DON'T USE MALWARE

COLLECT DATA TO ENABLE BETTER MONITORING, ALERTING, AND INVESTIGATION

UNDERSTAND WHAT SYSTEMS, APPLICATIONS, AND DATA ARE CRITICAL

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ADOPT “CONTINUOUS IMPROVEMENT” MINDSET

ALLOCATE TIME TO BRAINSTORM, UNDERSTAND YOUR DATA, AND IMPROVE

HUNTING INTRUDERS IS AN ONGOING ACTIVITY, NOT A ONE TIME “BREAK GLASS”

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PONEMON INSTITUTE. THE COST OF MALWARE CONTAINMENT. JANUARY 2015.

MOST SECURITY TEAMS CAN ONLY REVIEW 4% OF ALERTS

ARE YOUR SECURITY INVESTMENTS HELPING YOU FIND THE ALERTS THAT MATTER?

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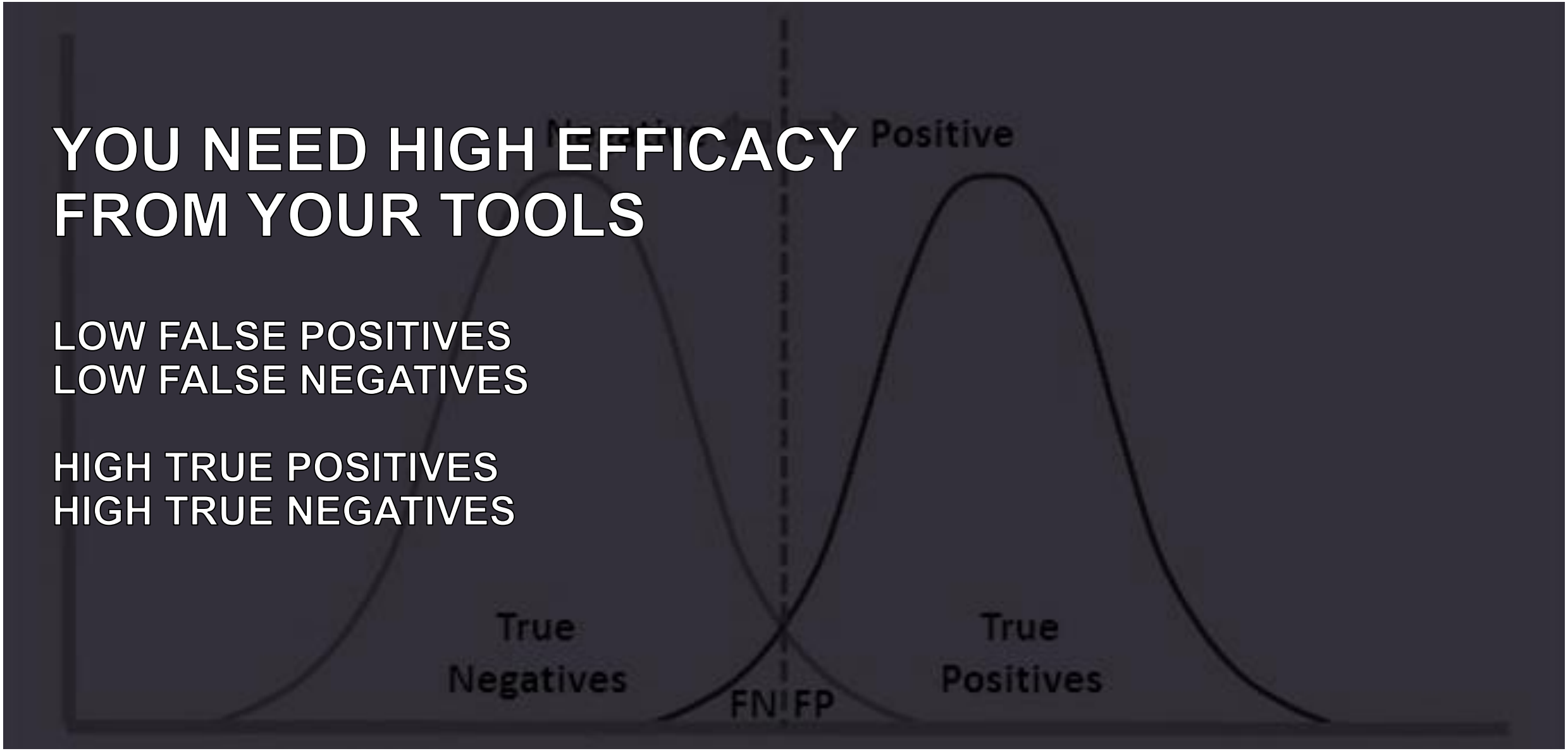
YOU NEED HIGH EFFICACY FROM YOUR TOOLS

LOW FALSE POSITIVES
LOW FALSE NEGATIVES

HIGH TRUE POSITIVES
HIGH TRUE NEGATIVES



YOU NEED CONTEXT TO UNDERSTAND YOUR ALERTS

ATTRIBUTION, INDICATORS, AND LEVEL OF RISK CAN GUIDE & INFORM YOUR RESPONSE

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YOU NEED VISIBILITY INTO BROADER PATTERNS

ARE SIMILAR EVENTS HAPPENING ELSEWHERE IN YOUR ORGANIZATION?

ACROSS YOUR INDUSTRY?

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YOU NEED EFFICIENCY FROM SECURITY INVESTMENTS

SECURITY TOOLS NEED TO FUNCTION TOGETHER SEAMLESSLY

SECURITY TEAMS NEED TO SPEND LESS TIME ON LOW VALUE TASKS

YOU NEED EXPERTS TO MANAGE YOUR RESPONSE

EVEN THE BEST TOOLS ARE USELESS WITHOUT PROFESSIONALS TO RUN THEM

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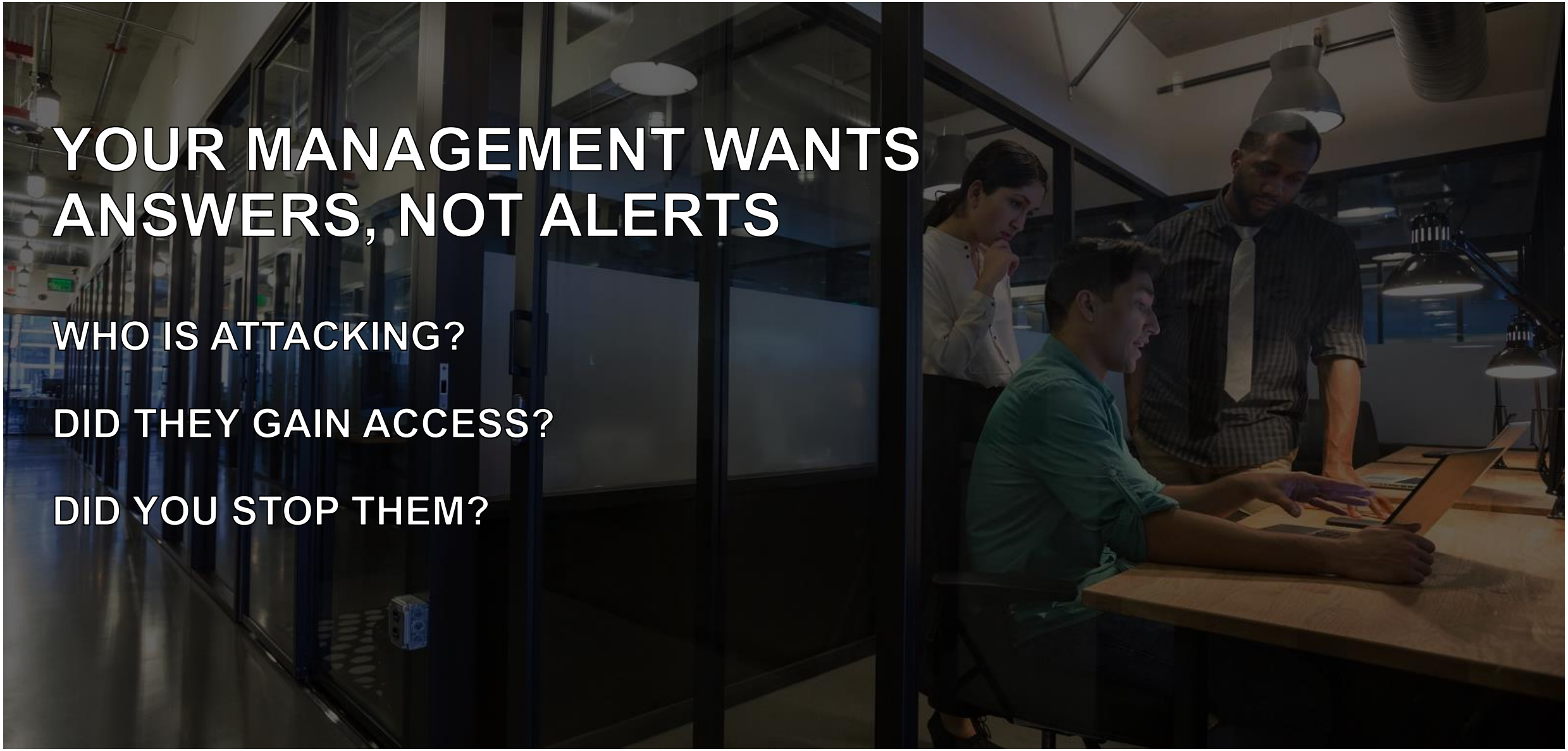

YOUR MANAGEMENT WANTS ANSWERS, NOT ALERTS

WHO IS ATTACKING?

DID THEY GAIN ACCESS?

DID YOU STOP THEM?

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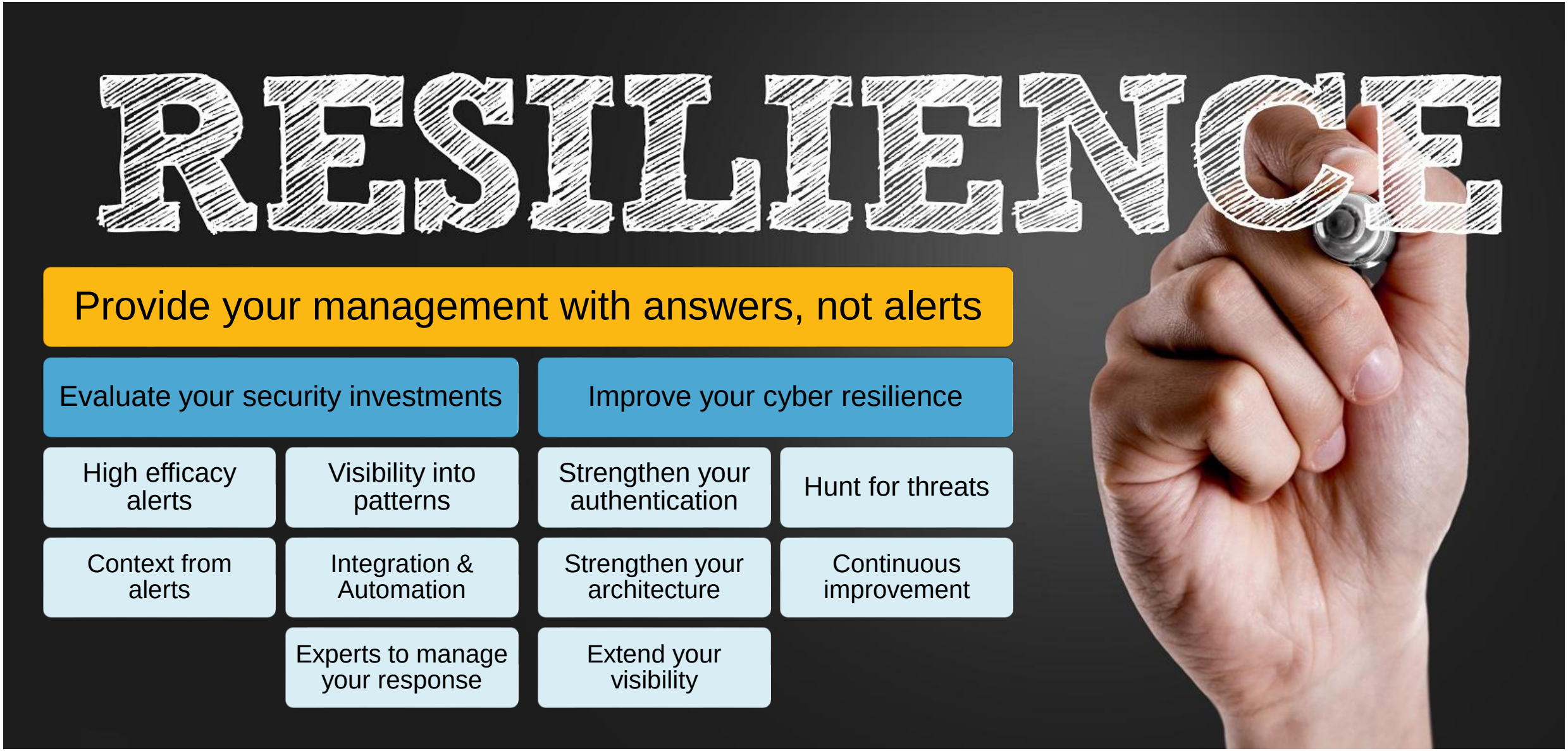

Provide your management with answers, not alerts

Evaluate your security investments

- High efficacy alerts
- Visibility into patterns
- Context from alerts
- Integration & Automation
- Experts to manage your response

Improve your cyber resilience

- Strengthen your authentication
- Hunt for threats
- Strengthen your architecture
- Continuous improvement
- Extend your visibility

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THANK YOU!

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SECURITY REIMAGINED