



# COMBATTING CYBER THREATS

PRESENTED BY

President, FireEye, Inc

# YEAR IN REVIEW

~ 500 INVESTIGATIONS

~17 COUNTRIES

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*CONCLUSIONS*

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AGENDA ~~ASO~~ WHAT DO WE DO?

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FIVE YEARS OUT

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THERE ARE **FEW RISKS**  
**REPERCUSSIONS**  
FOR THE ATTACKERS

ATTACKERS CONTINUE TO  
EXPLOIT **HUMAN TRUST**

# Attacks Will Continue to Reflect Geopolitical Conditions



CYBER-CRIME TRADECRAFT HAS **IMPROVED DRASTICALLY**

## **EXTORTION** IN CYBERSPACE IS RISING (BACK?)

**DISCLOSURE** IS MORE PROBABLE

DETECTION EFFICACY IS **WEAKER** IN  
**LATER** STAGES OF THE KILL CHAIN

ZERO DAYS DEPLOYED BY **NATION STATES**

ATTRIBUTION IS GETTING HARDER

ACCURATE AND TIMELY **ATTRIBUTION** IS CRITICAL  
FOR  
**DETERRENCE & LIABILITY**

# KEY WEAKNESSES

- ◆ Failure to detect spear phishing or malicious attacks
- ◆ Poor Credential Management
- ◆ Lack of Network Segmentation
- ◆ Single factor access to VPN or OWA
- ◆ Security safeguards not armed from privileged accounts
- ◆ Critical data for response not being collected





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CONCLUSIONS

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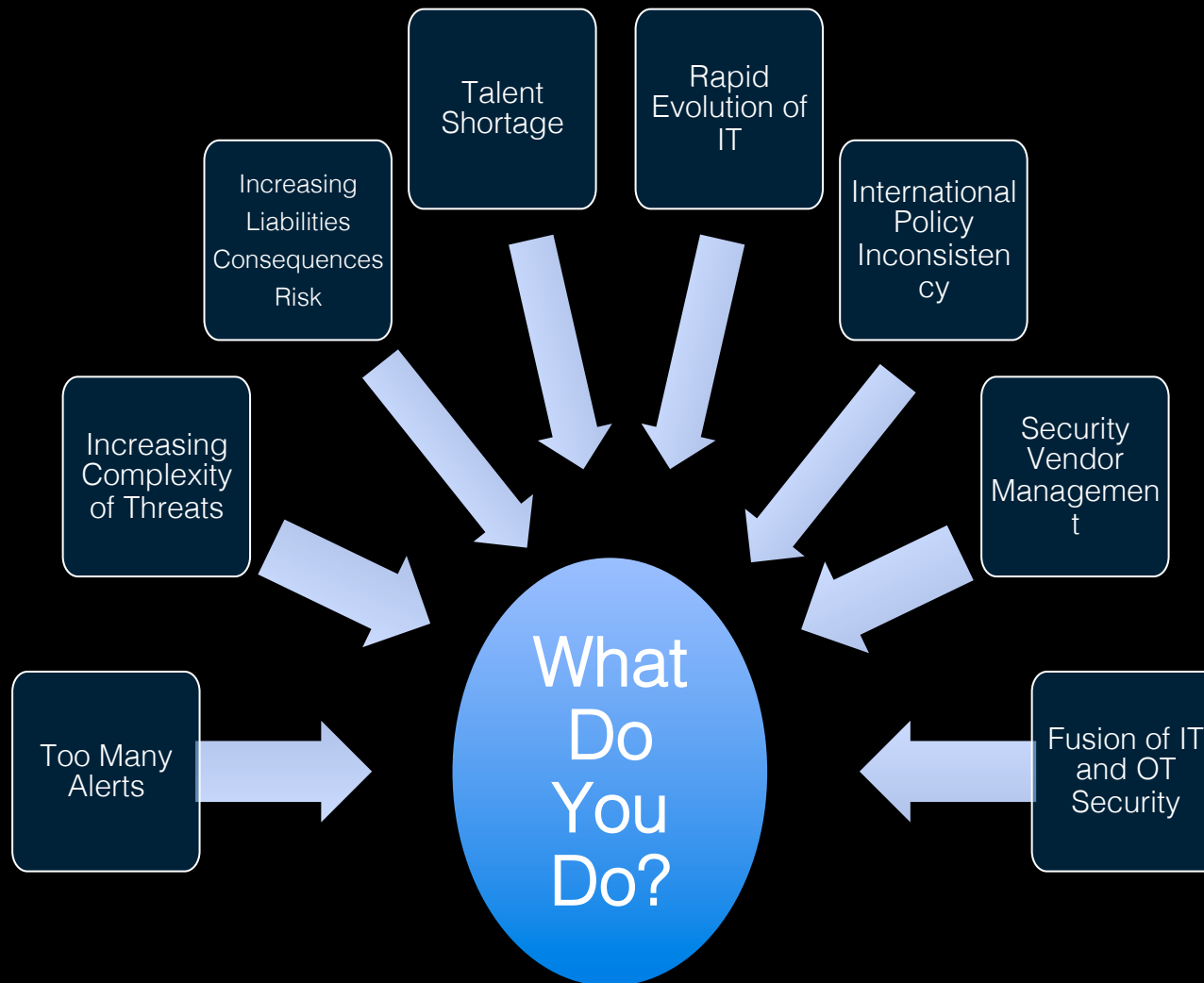
AGENDA ~~SA~~ WHAT DO WE DO?

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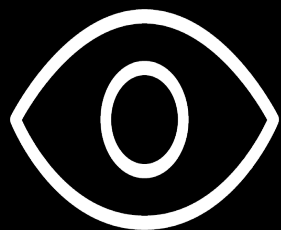
FIVE YEARS OUT

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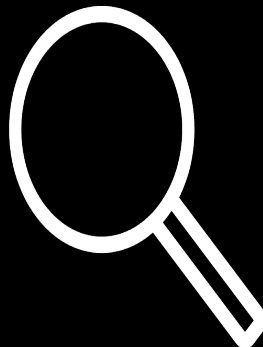
# The CISO Dilemma ...



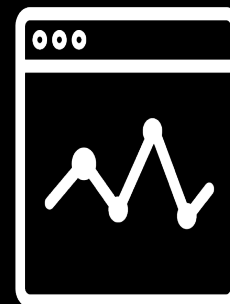
# Talent Shortage Addressed by Increased Automation



Higher Fidelity



Threat Data



Analytics / ML

# PROTECT THE NETWORK TO PROTECT THE DATA

- SECURE ENCLAVES
- NETWORK SEGMENTATION
- CLOUD MIGRATION

# PERIMETER PROTECTION TO COMPREHENSIVE PROTECTION

- NETWORK
- ENDPOINT
- CLOUD
- EXPLOIT
- MALWARE
- C2
- LATERAL MOVEMENT
- EXFIL
- TTPs

# LOG MANAGEMENT TO SECURITY ANALYTICS

- FILTER THE NOISE
- ANOMALY DETECTION

# REACT TO PROACTIVE HUNTING

- THREAT DATA FEED
- THREAT INTELLIGENCE  
(WHO)
- DETECT THE KNOWNS

# VULNERABILITY ASSESSMENT

## COMPROMISE ASSESSMENT



# Penetration Testing → Red Teaming

Penetration Testing

Red Teaming

## Emergence of Security Orchestration (Consolidation / Integration / Automation)

## What Is Working



Create Secure Enclaves



Credential Management



“Dry Runs” of Incident Response Plan



Require Two-Factor Authentication for Remote Access



Only Permit Authorized Programs to Run on Servers



Use New Technology to Block Advanced Malware



Focus on Phishing Prevention



Promote a “Security Culture”

# FIVE YEARS OUT

ALL CONFLICT WILL HAVE A CYBER  
COMPONENT

# ESTABLISHING INTERNATIONAL RULES OF ENGAGEMENT

# PRIVACY AND ANONYMITY

# Assess Your Team

How would you compromise our company?

If an attack was successful, how would we detect it?

If we had a security breach today, what is the worst-case scenario? Who would you disclose the details to?



THANK YOU