



MENA  
INFORMATION SECURITY  
CONFERENCE 2018

Leveraging Machine Learning &  
AI in Cyber Defense

**Cyber Risk Management - New Rules  
of Engagement for a complex world**

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WE USE SECURITY ANALYTICS AND SOPHISTICATED  
RISK AND THREAT MANAGEMENT TECHNOLOGY TO  
DYNAMICALLY PROTECT OUR CLIENTS BY  
IDENTIFYING, ANALYZING, PREDICTING AND  
PREVENTING CYBER THREATS

IN REAL TIME\_

**OUR CORE**

WE KEEP YOUR  
BUSINESS IN  
BUSINESS



CYBER SECURITY AT THE FOREFRONT

# LANDSCAPE



**3B**

**Users**

Connected to Internet

**10B**

**Devices**

IP connected Devices

**72EB**

**Traffic**

Per month

**8ZB**

**Cyberspace**

Volume of Data

US DOLLARS

**1TN**

SECURITY SPENDING

will be spent globally on cybersecurity from 2017 to 2021\*

**240** DAYS  
LACK OF CAPABILITY  
average time  
to detect and  
react to cyber  
breaches  
today



FROM COMPLICATED TO COMPLEX

# WHY CYBER FAILS



# CYBER SECURITY IS HARDER THAN GOING TO MARS



COMPLEXITY CREATES A FUNDAMENTALLY DIFFERENT SITUATION FROM THE COMPLICATED CHALLENGES OF THE PAST. COMPLICATED PROBLEMS REQUIRED GREAT EFFORT BUT ULTIMATELY YIELDED TO PREDICTION. COMPLEXITY MEANS THAT IN SPITE OF OUR INCREASED CAPABILITIES TO TRACK AND MEASURE, THE WORLD HAS BECOME IN MANY WAYS VASTLY LESS PREDICTABLE. THINGS THAT ARE COMPLEX HAVE NO SUCH DEGREE OF ORDER, CONTROL, OR PREDICTABILITY

## UNPREDICTABLE AND UNSTABLE ENVIRONMENT VECTORS

- Technology Evolution (Zero Days)
- Human Factor (S/w Developers, users, clients)
- Fast Growing Attack Surface (IOT, Supply Chain and Ecosystems, Cloud)
- Emerging Threats
- Attribution

**70** different security vendors provide services and products on average per enterprise

**SECURITY 'SPRAWL' NOT SUSTAINABLE**

**65M**  
LINES OF CODE

Average lines of  
code used by  
major desktop  
operating  
systems



**300M**  
UNIQUE SIGNATURES

New pieces of malware,  
computer viruses or  
other malicious software  
were created last year



NEW RULES OF ENGAGEMENT  
FOR A COMPLEX WORLD

**REBUILD CYBER**

# CYBER SECURITY IS A SYSTEM

## TECHNOLOGY

- Threat Detection
- Threat Prevention
- Analytics

## PEOPLE

- Data
- Decide
- Analyze
- Escalate

## PROCESS

- Access Management
- Exception Management
- Workflows
- Policy



## NEW RULES OF ENGAGEMENT

1

### TRUST

(Trustworthiness) Ability to trust mission critical infrastructure components, resources and supply chain.

2

### RESILIENCE

Ability to continuously deliver the intended outcome despite adverse cyber events

3

### AGILITY

Ability to renew, adapt, change and succeed in rapidly changing, ambiguous, unpredictable and turbulent environment.



# 1 ASSURANCE AND TRUSTWORTHINESS

- Manage your exposure
- Increase the cost to threat actors and buy time for investigation/remediation

# 1 ASSURANCE AND TRUSTWORTHINESS

- Prioritization
- Redundancy
- Resources
- Supply Chain
- Product Development Life Cycle - SDLC

2

## RESILIENCY

- Assume the breach will occur and proactively seek to reduce the impact of that breach.
- Time the most valuable asset
- Time to awareness - the KPI

2

# 01

## PROBABILITY

It is a mathematical certainty that every security model will inevitably fail at least once, regardless of the defense and technology sophistication involved.



2

## SITUATIONAL AWARENESS

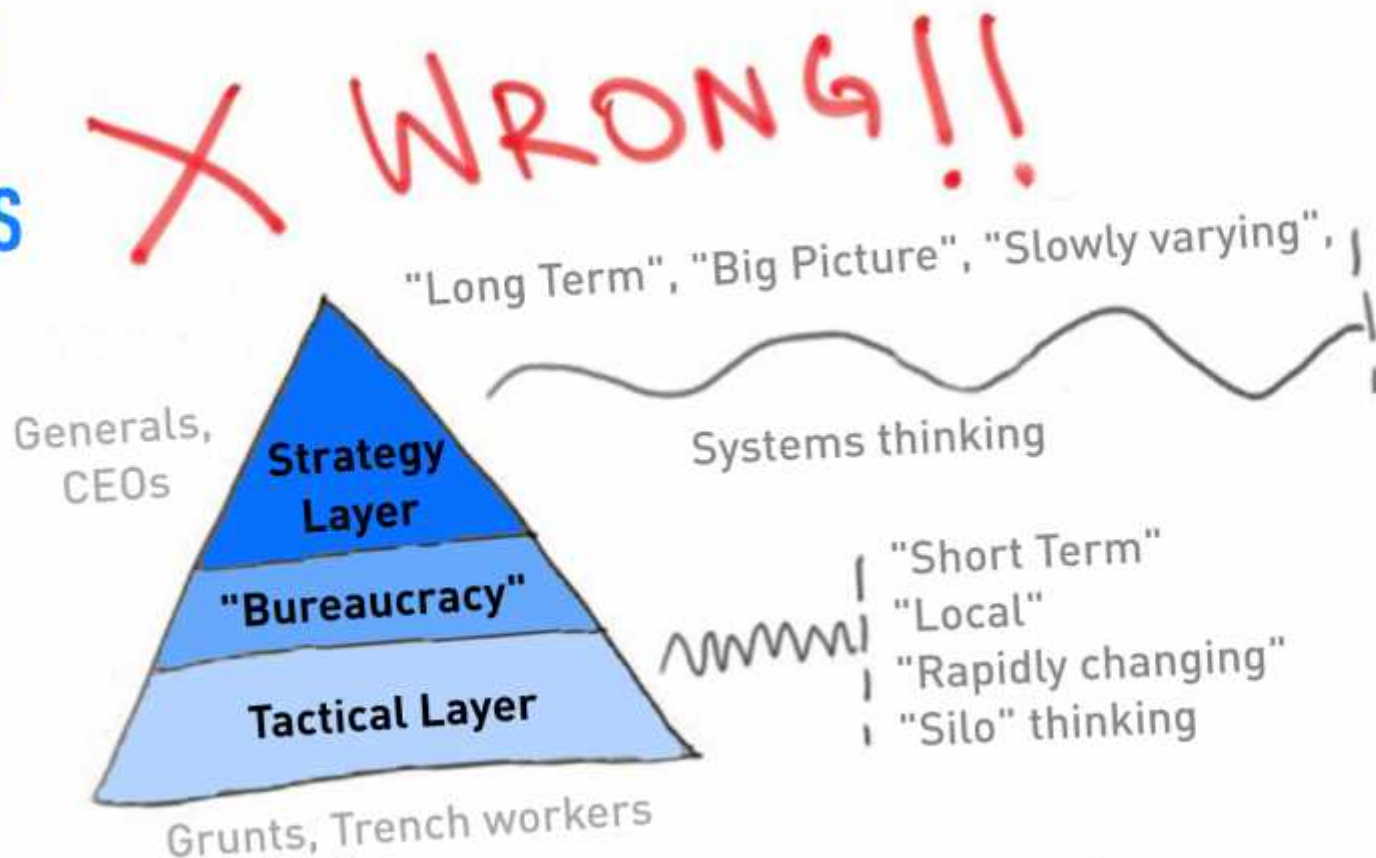
- Change the Fundamental Structure from Command and Control to Collaborate and Adopt
- Break the Barriers for People - You don't need everyone to know everyone but someone to know someone in other areas
- Build a Multidisciplinary Task Force (adoptability and flexibility)
- CREATE SHARED CONSCIOUSNESS

3

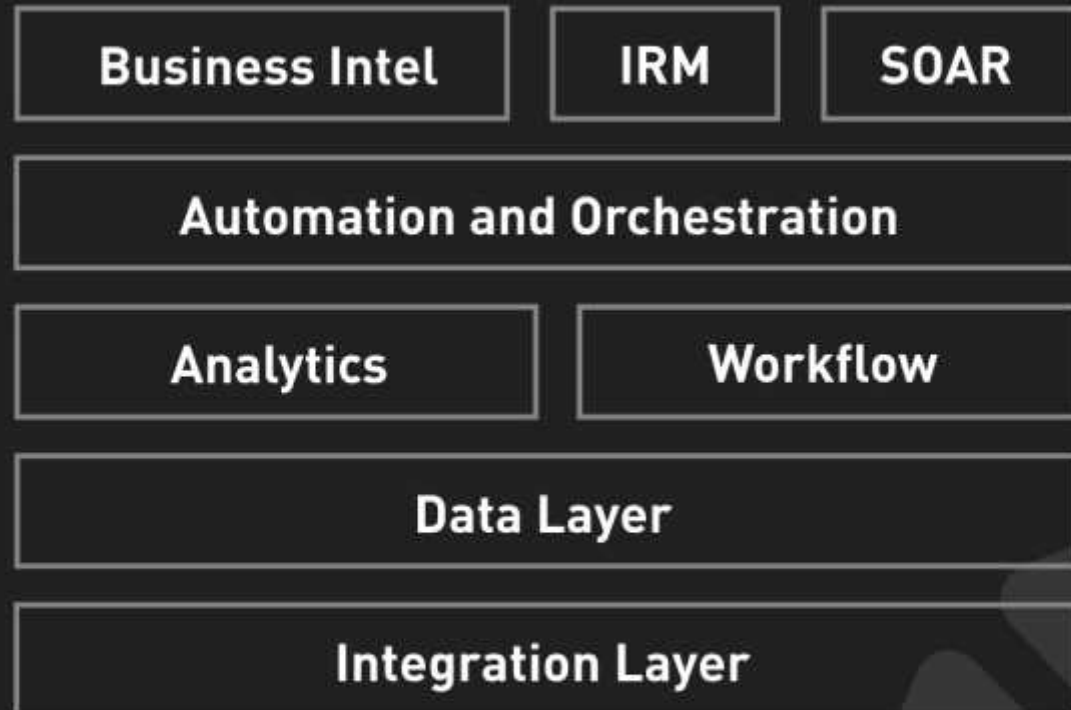
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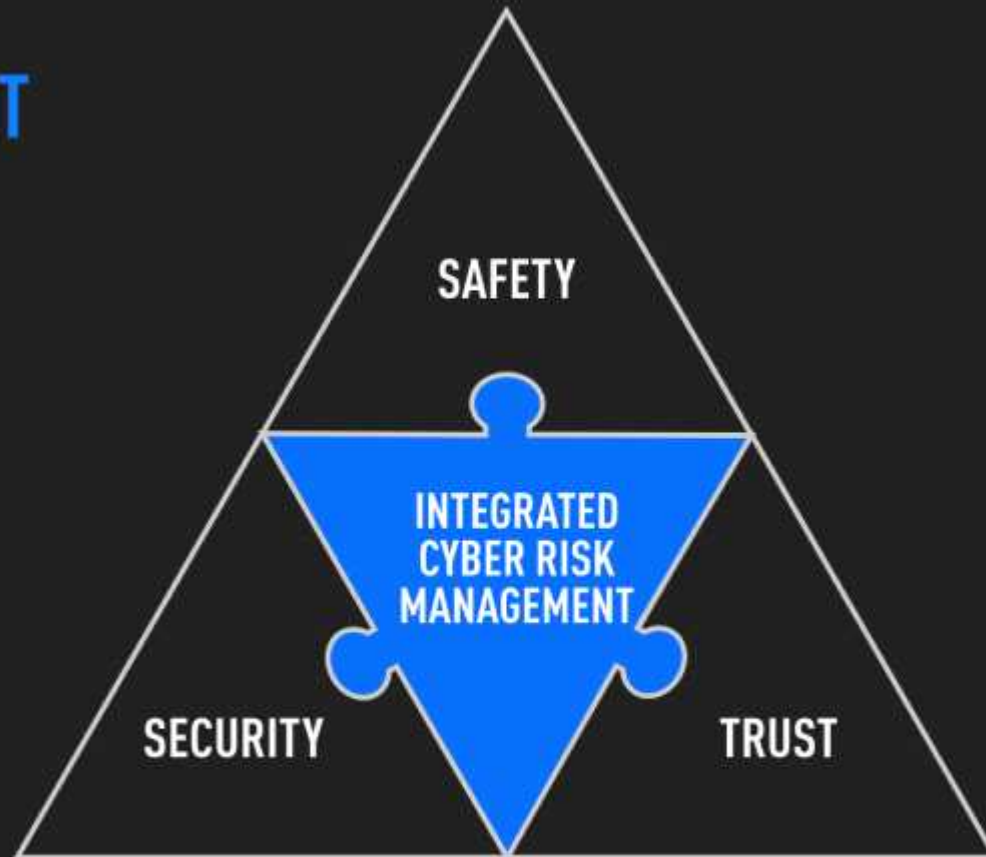
# A GAP BETWEEN STRATEGIC AND TACTICAL LAYERS



# REBUILD CYBER FROM GROUND UP AN "ERP" FOR CYBER



# A MINDSET SHIFT





## CYBER RISK MANAGEMENT CAN BE A REAL ENABLER

- For cyber
- For the business
- For the consumers
- For the market
- For the industry...

**THANK YOU**  
George P. Patsis, CEO



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