

QUIET SHIFT SHIFT



CHRISTIAN KUBIK

From Security to Resilience

Manager Field Advisory Services Team, EMEA&I Regions

TODAY'S 3 OBJECTIVES

1.

DISCUSS THE PROBLEM
OF EXPANDING ATTACK
SURFACES

2.

EXPLORE THE
RELATIONSHIP
BETWEEN THESE
RISKS AND STATE-
OF-THE-ART CYBER
RESILIENCE

3.

DEMONSTRATE WHY A
FOCUS ON CYBER
RESILIENCE
APPROACH MAKES
SENSE



TRADITIONAL VIEW

ATTACK SURFACE

NETWORK INSECURITIES

SOFTWARE BUGS

PHYSICAL SECURITY
LOOPHOLES

SOCIAL ENGINEERING-
PRONE PEOPLE

OPEN
PORTS

WEAK
PROTOCOLS

INSUFFICIENTLY
SECURED
IN-HOUSE
DEVELOPED
APPLICATIONS

VULNERABLE
COMMERCIAL
PROGRAMS
(E.G. WORDPRESS)

ROGUE OR
DISSATISFIED
CURRENT AND
FORMER
EMPLOYEES

OPENLY
DISPLAYED
LOGIN
CREDENTIALS
(E.G., USERNAME-
PASSWORD
COMBINATION ON
STICKY NOTES)

REUSED OR
RECYCLED
PASSWORDS

UNMONITORED
USE OF SOCIAL
MEDIA AND
UNPROTECTED
PERSONAL
DEVICES

RIGHT NOW,
IN THE REAL
WORLD...

ATTACK TYPES AND ATTACK SURFACES

RANSOMWARE

PHISHING

DATA EXFILTRATION

SOCIAL
ENGINEERING

DDOS

1. CLOUD

2. REMOTE

3. IOT

4. SSC

5. SOCIAL

6. AI

THE
STATUS
QUO
FALLS
SHORT

TOOLS

HYBRID CLOUD TOO OFTEN
MEANS TOO MANY TOOLS

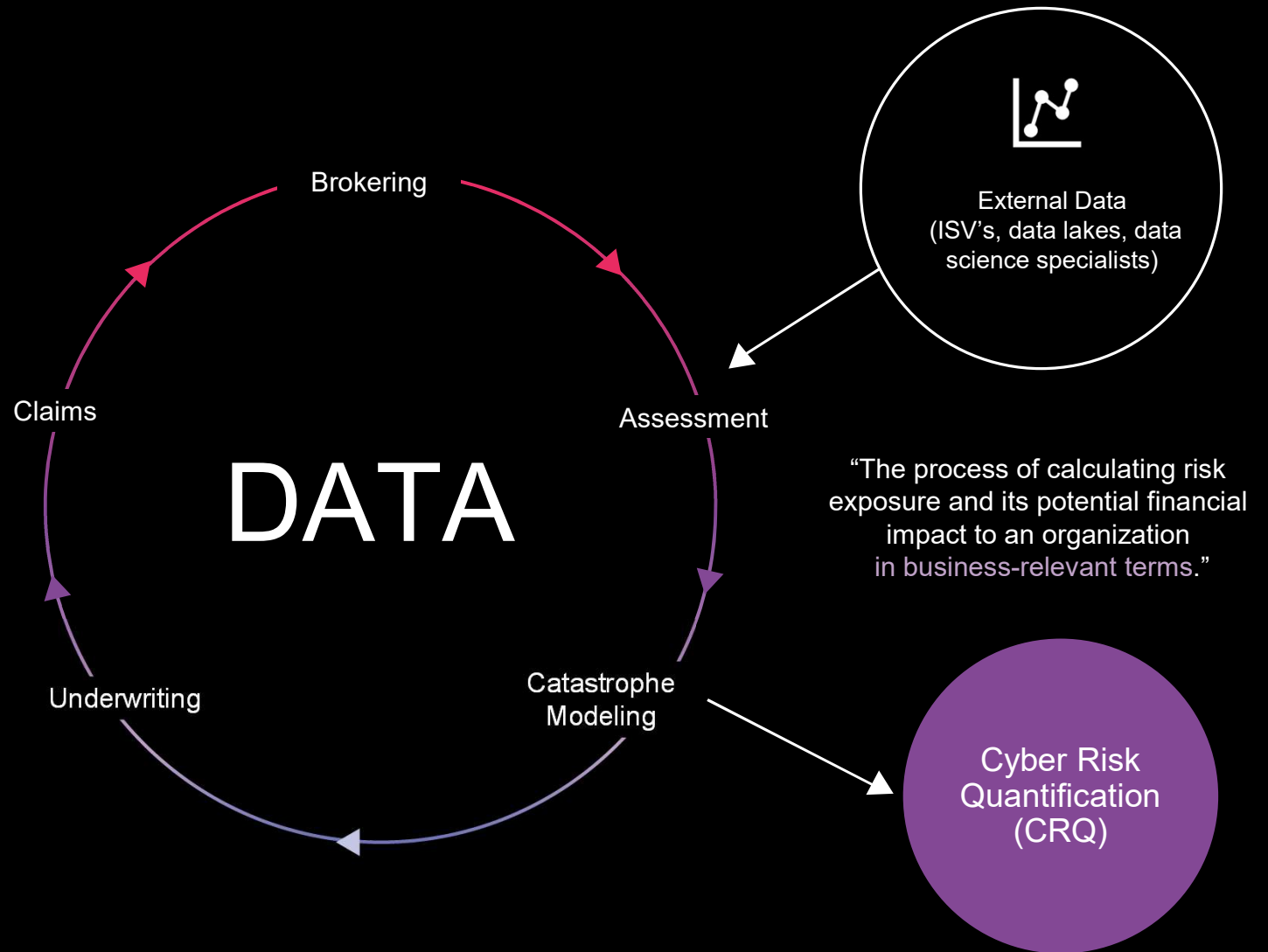
SKYROCKETING

COSTS



BUILDING A RESILIENT BUSINESS REQUIRES A RE-THINK

THE HIDDEN VALUE OF CYBER INSURANCE



Recovery Readiness Is a Critical Step in Cyber Resilience

NIST Cyber Security Framework

Identify

Protect

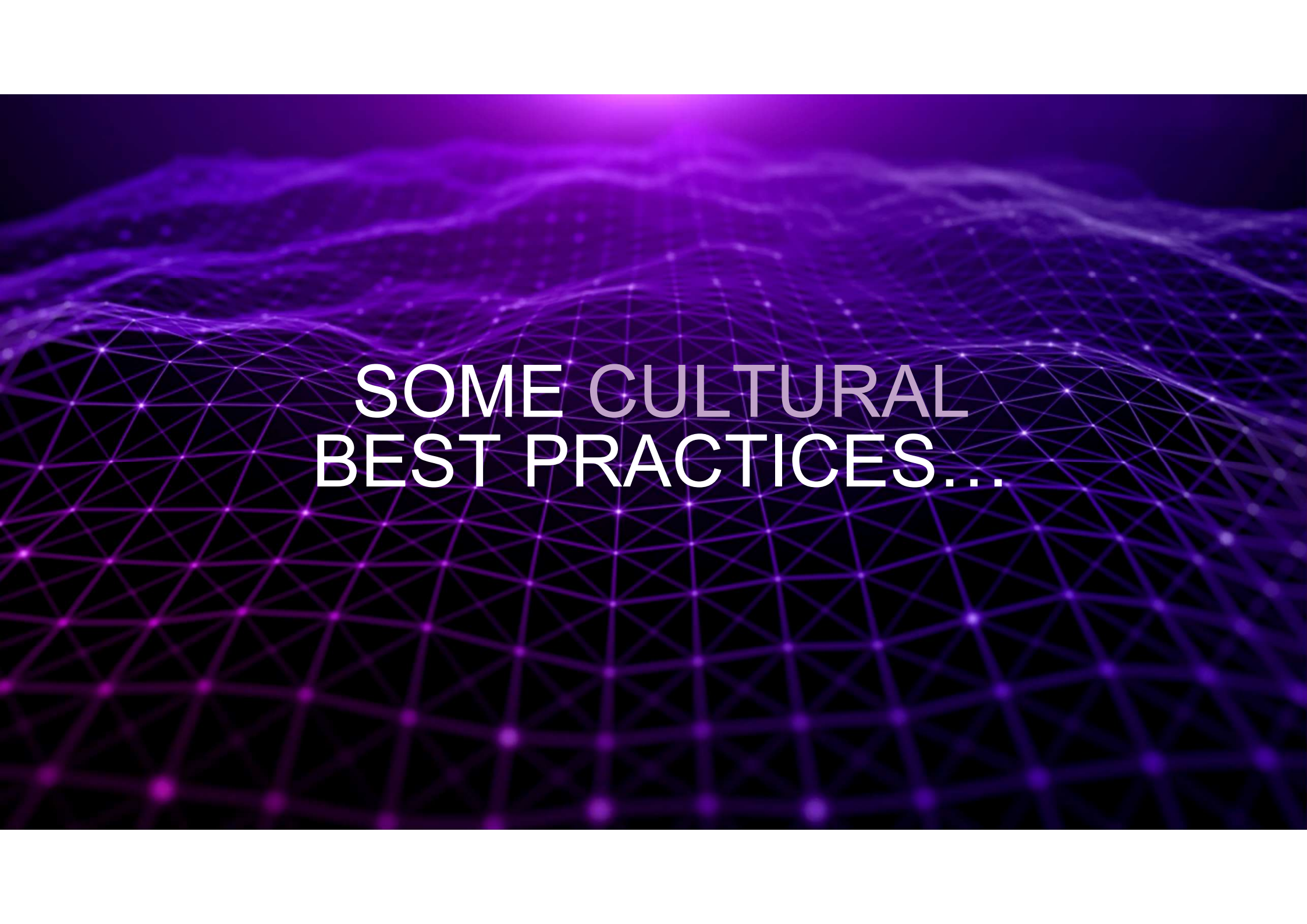
Detect

Respond

Recovery

Security is blind to unknowns.
They must embrace the breach.

Recovery readiness and testing
enables business to be **cyber resilient**.



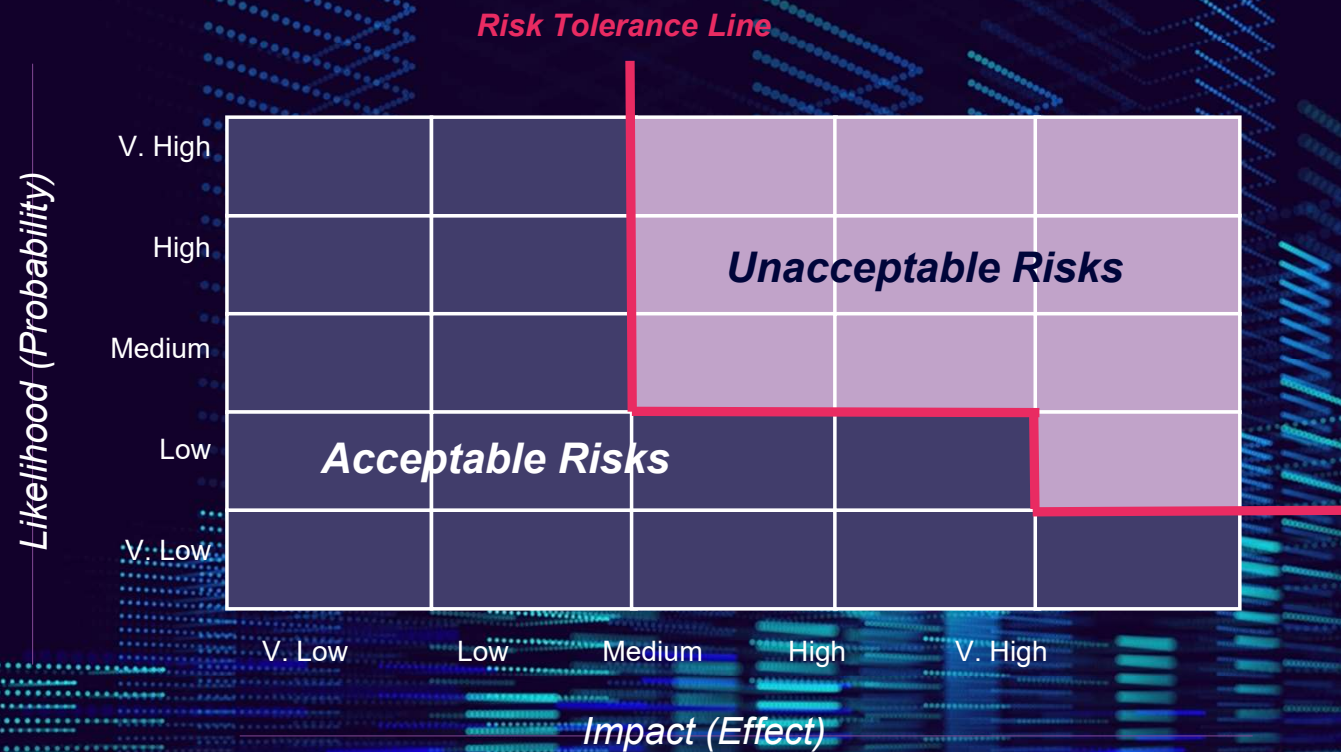
SOME CULTURAL
BEST PRACTICES...



Infrastructure
Team (CIO)

Security
Team (CISO)

Preferred Risk Profiling





Cyber Recovery $\neq$ Disaster Recovery



M.T.C.R.

Mean Time to **Clean** Recovery

Cyber Recovery Maturity Model

	Level 1 Initial	Level 2 Developed	Level 3 Defined	Level 4 Managed	Level 5 Optimized
IDENTIFY	Awareness of need for asset and risk management.	Asset and risk management procedures are developed.	Asset and risk management processes are fully documented and standardized.	KPIs for asset and risk management are tracked and analyzed.	Continuous refinement of asset and risk identification using predictive analytics.
PROTECT	Basic cybersecurity measures in place.	Comprehensive cybersecurity policies developed.	Cybersecurity measures are fully integrated and standardized.	Cybersecurity effectiveness is measured, tested, and analyzed.	Continuous improvement and adaptation of cybersecurity measures and processes, which are routinely tested.
DETECT	Initial detection methods are used.	Systematic approach to threat detection.	Threat detection processes are fully integrated and standardized.	Quantitative measures of detection effectiveness.	Predictive analytics inform detection strategies.
RESPOND	Incident response is reactive.	Incident response plans are developed.	Incident response is standardized and documented.	Incident response effectiveness is quantitatively managed and occasionally tested.	Adaptive incident response strategies based on continuous testing and learning.
RECOVER	Recovery efforts are ad hoc.	Formal recovery processes are developed.	Recovery processes are standardized and integrated.	Recovery processes are quantitatively managed, tested, and measured.	Recovery processes are continuously simulated, tested, improved and adapted to threats.

Developing A Cyber Recovery Plan

- Scope & Objectives
- Risk Assessment
- The Recovery Team
- Technical Architectures
- Processes
- Threat Modelling
- Testing & Validation
- Communications
- Continuous Improvement



SOME ARCHITECTURAL BEST PRACTICES...

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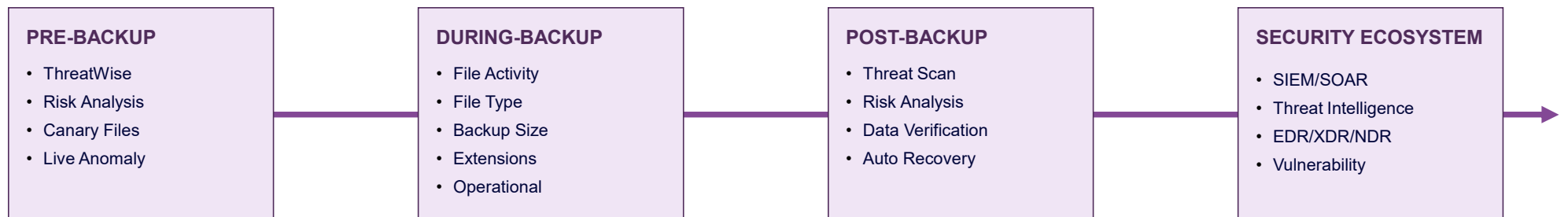
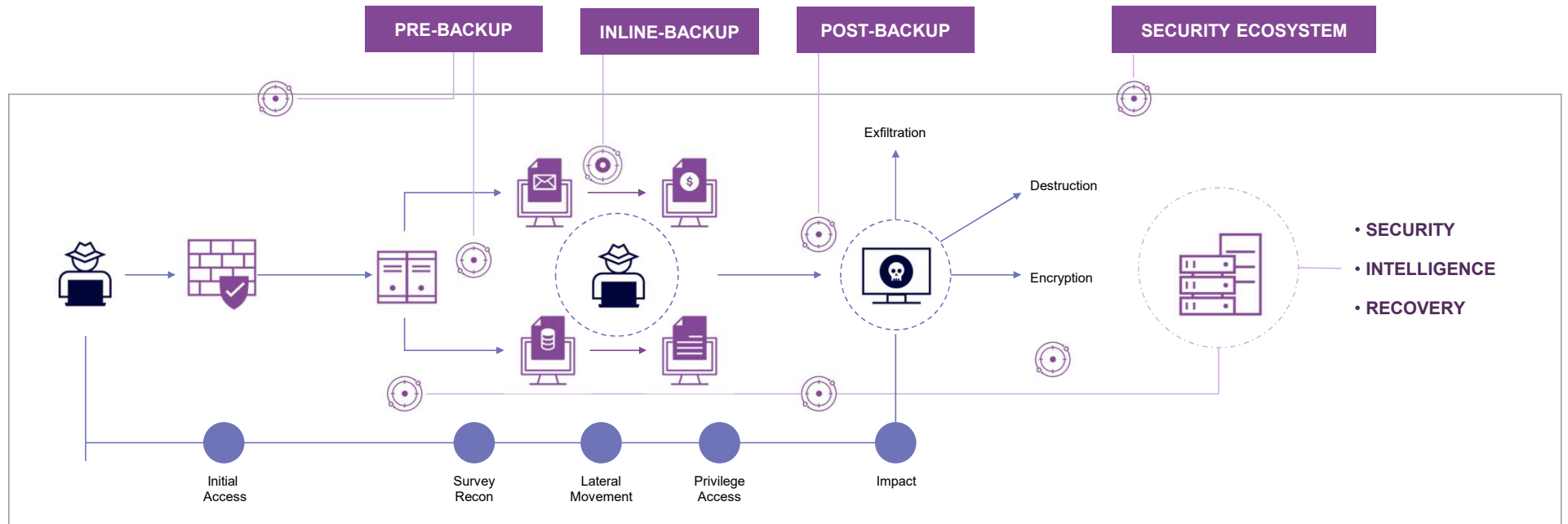
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HOW IT WORKS

EARLY WARNING



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NIST Cyber Security Framework

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Protect

Detect

Respond

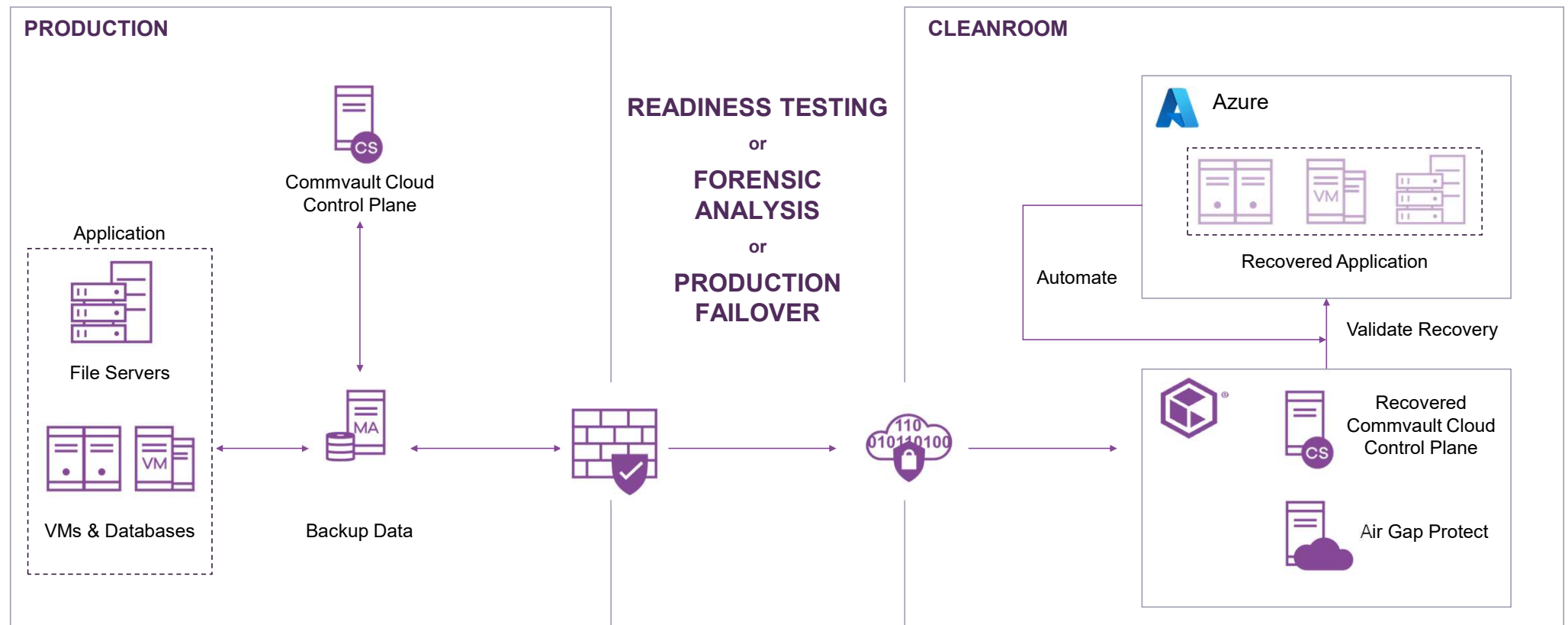
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HOW IT WORKS – CLEANROOM RECOVERY

CLEANROOM RECOVERY – DELIVERING END-TO-END AUTOMATION



SUMMARY

- The threat landscape has **fundamentally changed**
- An over-reliance on “Protect-Detect-Respond” is **unwise**
- Actuarial science is teaching us lessons about **what matters**
- Need to focus on Risk, Readiness & Recovery.... **RESILIENCE**



Thank you!

