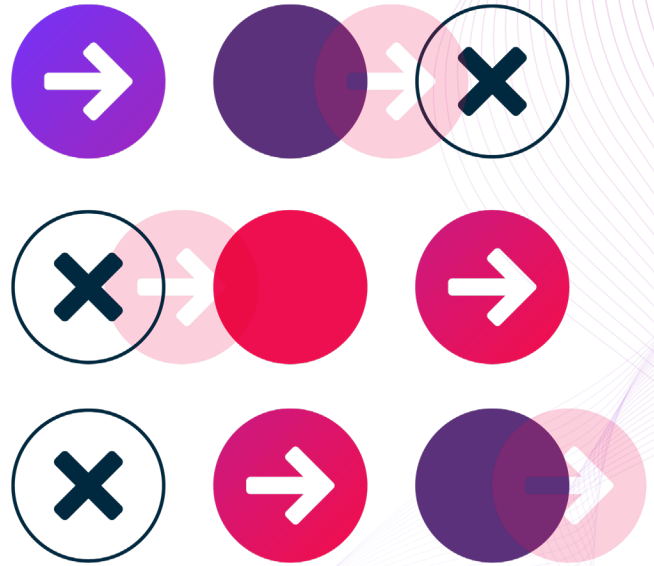
VALIDATE 2022

IBM Security

Prepare to Prevent Business Disruption



SafeBreach

IBM Security

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IBM Security Services

This is a practioner-to-practioner conversation, art of possible conversation cannot be treated as declaration of future capabilities.

Cybercriminals remain adept at successfully infiltrating organizations across the globe

Evolving threat landscape

21%

Ransomware share of attacks

41%

Attacks exploited phishing for initial access

$4.01M

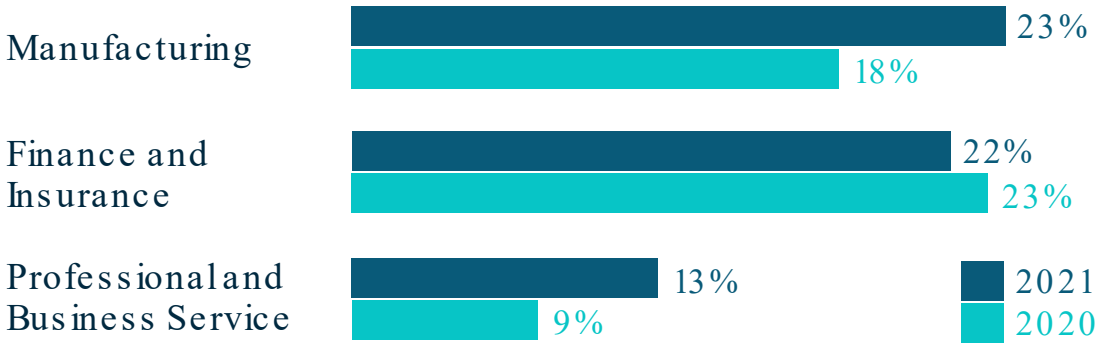
Average cost of a mega data breach (50-65M records)

2,204%

Increase in reconnaissance against Operational Technology (OT) devices

Top industries targeted

Percentage of attacks



Linux threats on the rise

Year-over-year increase in Linux ransomware innovation across cloud environments

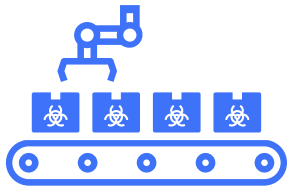
Sources: 2022 IBM X-Force Threat Intelligence Report; 2021 IBM Security Cost of a Data Breach Report

We attribute these security exposures to these key dynamics

Organizations lack reliable controls to prevent business disruption

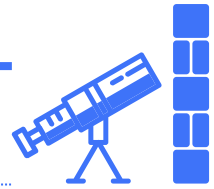
New & Expanding Attack Vectors

Attackers are using automation



Skills gap

Lack of visibility

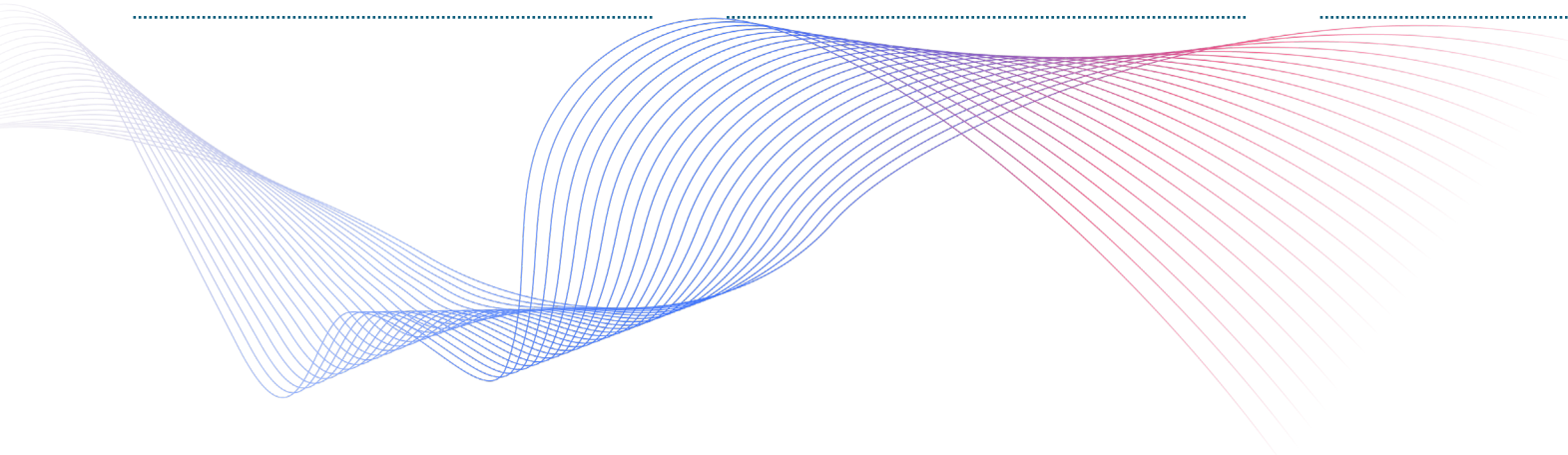


Technology sprawl

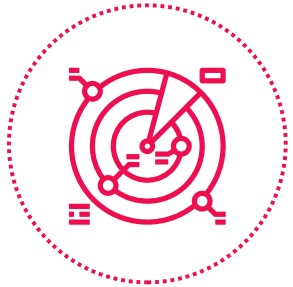
What we're hearing from clients

From thousands of engagement across the world,
we've heard some common security concerns.

- Detect and respond to threats faster
- Reduce mean time to resolution
- Safeguard workloads in hybrid multi-cloud environments
- Enhance and leverage existing security investments



What we hear from our analysts



Reduce noise, enrich with intel and context

Better tools for triage, investigation and response

Immersive and hands-on learning of latest attacks

Make the security technologies effective

Under prepared client was at risk
of major financial opportunity

Well prepared client avoided business disruption
through faster detection and response

Unusual activity

Notified victim devices

Isolated machines

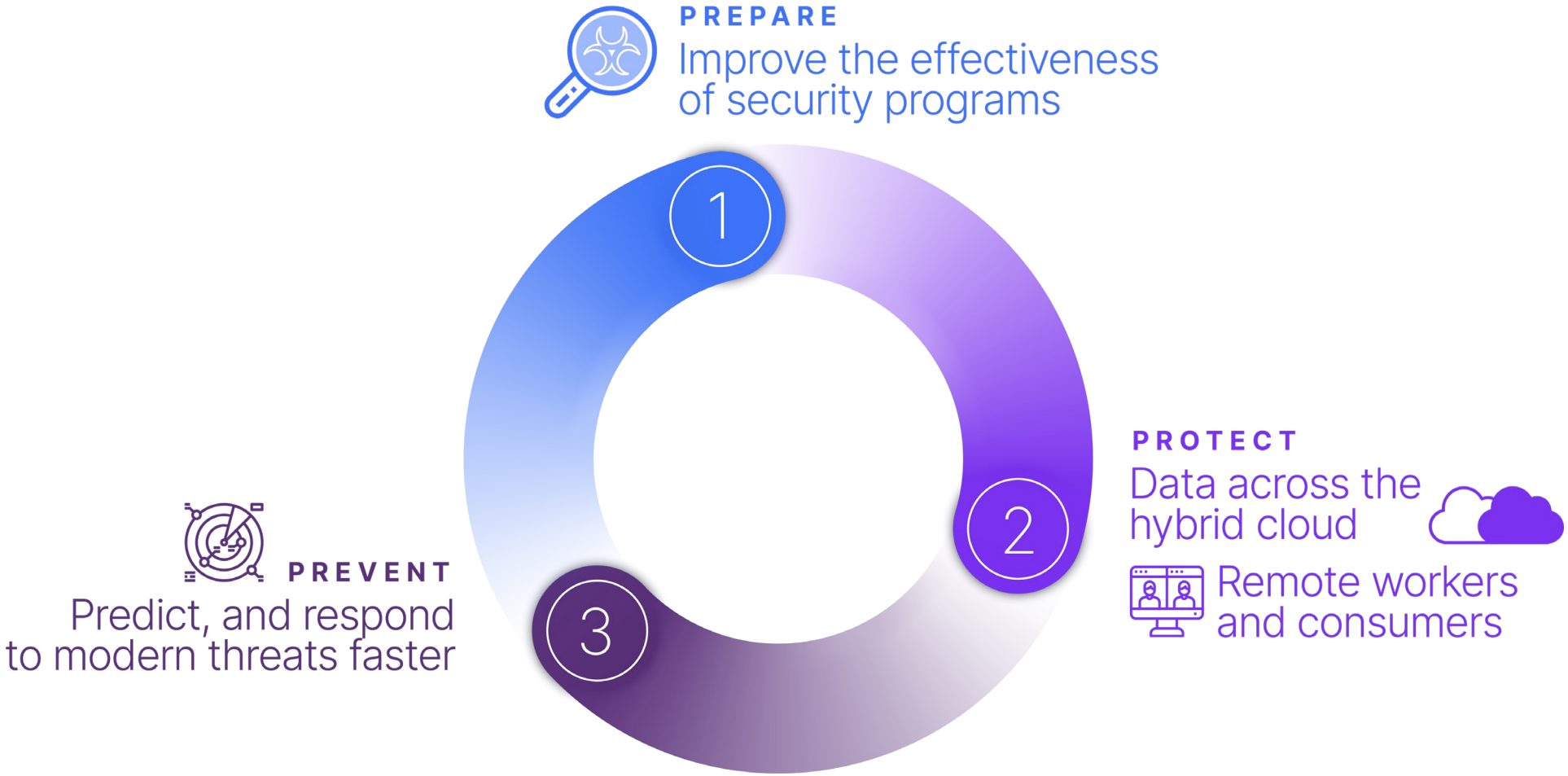
Engaged Incident response

Source identified

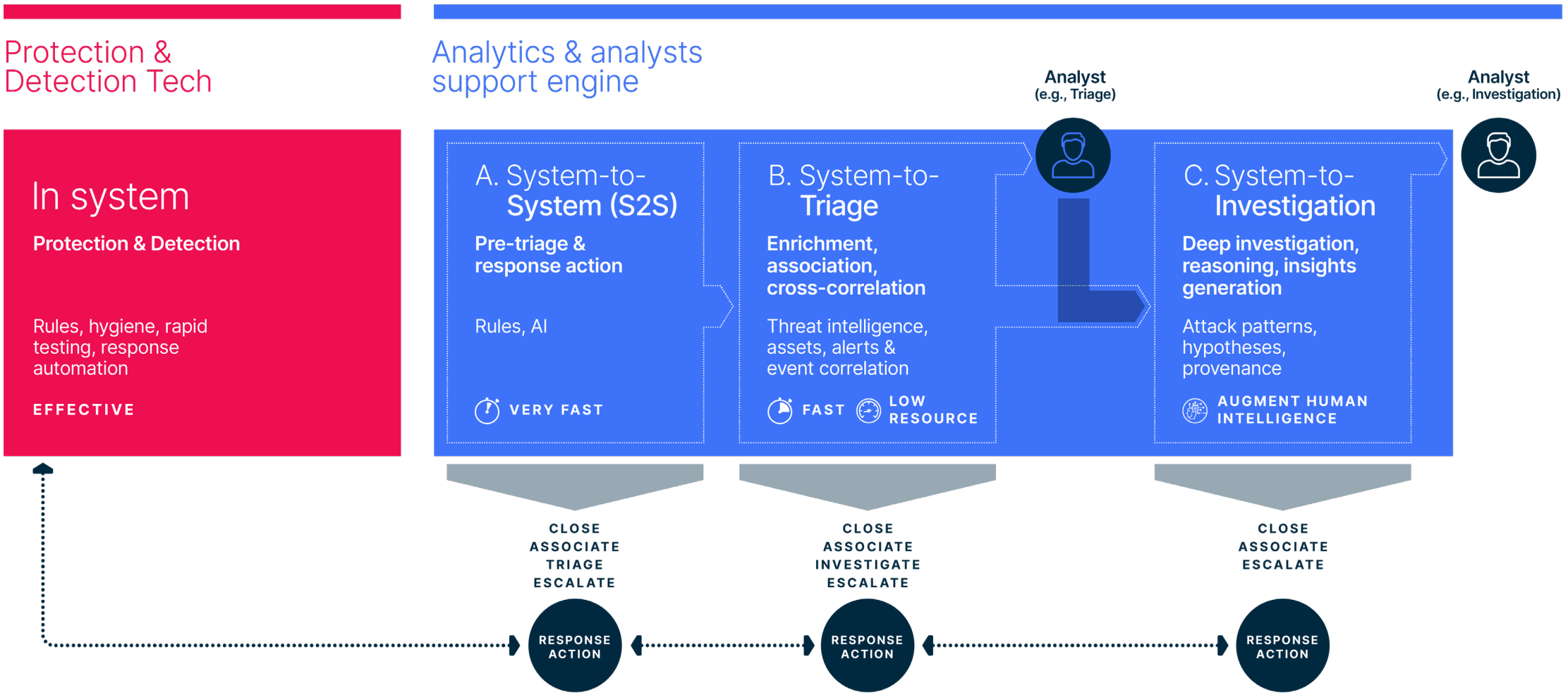
Additional rules applied

Remediation

We should Prepare to address evolving threats, respond and protect faster



Take a two-pronged approach through the threat management lifecycle to improve enterprise resiliency



1. Prepare the detection and protection technologies

Adopt a risk based approach

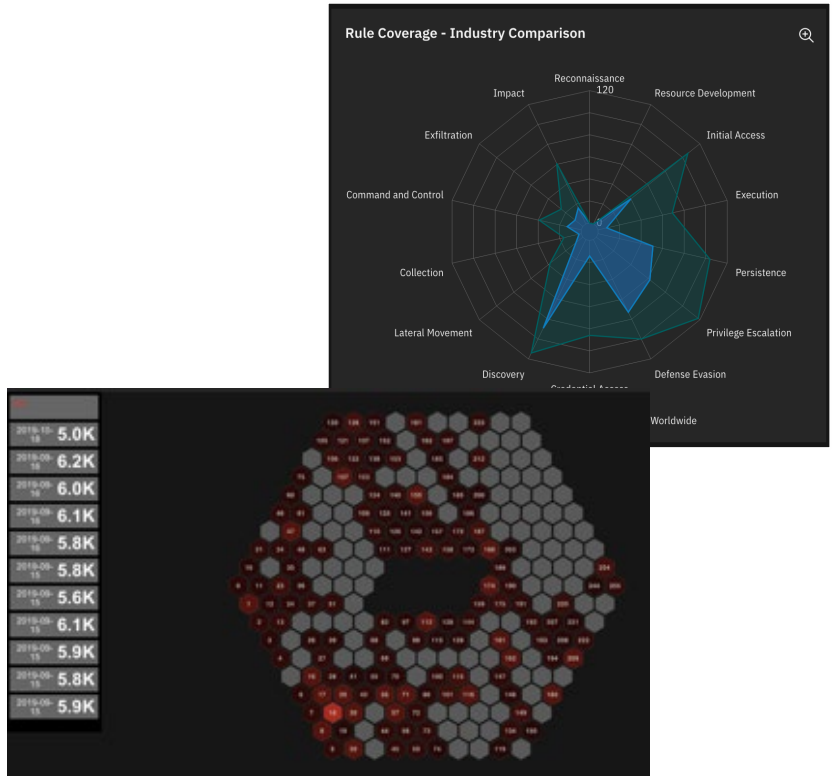
Harden systems, detect drift and automate to remediate

Weaponized Exploits (WX) centric risk-based approach to vulnerability Management

Security technology optimization (ex. FW rule optimization)

Continuous improvement through MITRE ATT&CK-based SIEM posture assessment and recommendation

Automate adversarial simulation with BAS to proactively assess and enforce



2. Prepare the analysts

Skills and expertise through immersive education and training

Happy analysts, happy clients;
Quality of Experience improvement
for Clients and IBM'ers

Learn latest and greatest attacks
through Breach Attack Simulation on
representative Hybrid cloud lab

Information curated in single pane of glass,
reduce screen surfing and steps

3. Prepare AI

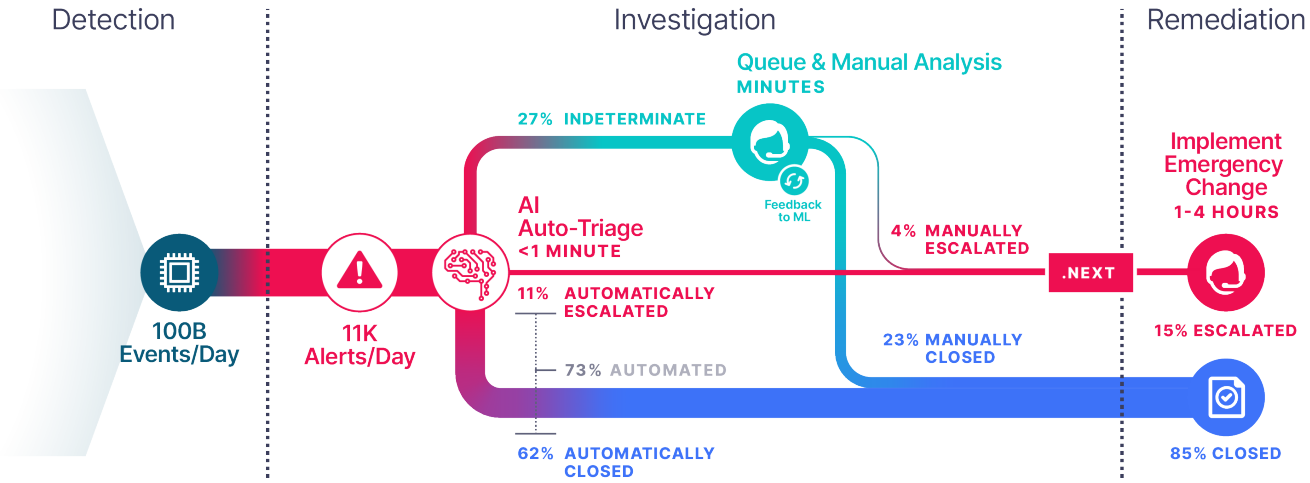
Improve response time through AI-enabled multilateral detection and response

Reduce noise for analysts with AI so they can focus on high value alerts

Reduce triage time through recommendations with explanation and reasoning

Faster investigation through structured playbooks with intel enrichment and intuitive visualization

Automated response through fact-based enrichment

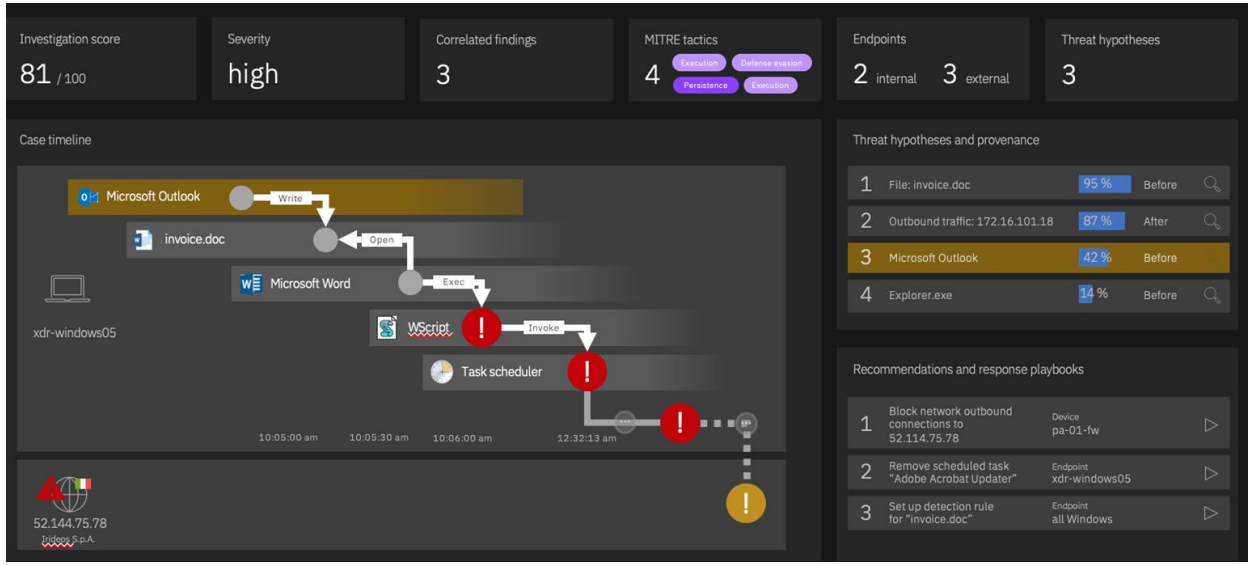


Can we predict to prevent ?

Use simulation data from Breach & Attack Simulation to train and test AI models. Use it for early warning?

Proactively assess security controls posture and remediate

Speculative cause (before) and effect (after) hypotheses



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Ready for future battles

Thousands of IBM Researchers in 12 labs across 6 continents are busy working on security projects that will shape our future

Good AI versus bad

IBM researchers are finding ways to address the weaknesses found in AI systems

Blockchain for security

IBM invented the way to share threat intelligence that's anonymous and trusted

Quantum-safe cryptography

Lattice cryptography will protect organizations from quantum-enabled hackers

Securing the world of things

IBM researchers are working on cryptographic algorithms and protocols, and key management to enable end-to-end IoT security

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FROM DEFENSE TO OFFENSE


Q&A

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