



Introduction to Microsoft Security Exposure Management

Presented by
Lexi Lederman, Customer Experience Engineering PdM



Agenda

- Learning objectives
- Why do we need exposure management?
- What is Microsoft Security Exposure Management?
- In-product demos
- Q&A



Learning objectives

After this training you will be able to...

- Understand the concept of exposure management and its significance in the current cyber landscape, enabling you to identify and prioritize vulnerabilities within your organization's digital infrastructure.
- Effectively utilize the Microsoft security-exposure management solution, including in-product exploration and practical demonstrations, to enhance your organization's security posture and reduce risks.
- Integrate exposure-management data across various Microsoft Defender products, allowing for a unified approach to security operations and improved decision-making in response to potential threats.

Acronyms

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MSEM

MDI

MDO

MDA

MDE

MDC

MDVM

CSPM

EASM

CVE

CVSS

What it means

Microsoft Security Exposure Management

Microsoft Defender for Identity

Microsoft Defender for Office

Microsoft Defender for Cloud Apps

Microsoft Defender for Endpoint

Microsoft Defender for Cloud

Microsoft Defender Vulnerability Management

Cloud Security Posture Management

External Attack Surface Management

Common Vulnerabilities and Exposures

Common Vulnerability Scoring System

Evolution of vulnerability management

1 TI-based vulnerability management

- Asset discovery (endpoints, servers)
- CVE enumeration
- CVSS rating



2 Risk-based vulnerability management

- Asset discovery (+ Mobile, identity, apps, web)
- Weakness enumeration
- Contextual prioritization
- Security validation



3 Unified Exposure Management

- Asset discovery (+ SaaS, cloud, data, supply chain)
- Continuous assessment
- Risk reduction mobilization
- Business integration

The demands of security teams are increasing

The average security team is responsible for:

393,419 assets

(Apps, data, devices, controls, network, users...)



The average number of exposures per org:

830,639 exposures

(CVEs, misconfigured controls, privileged identities, secrets...)



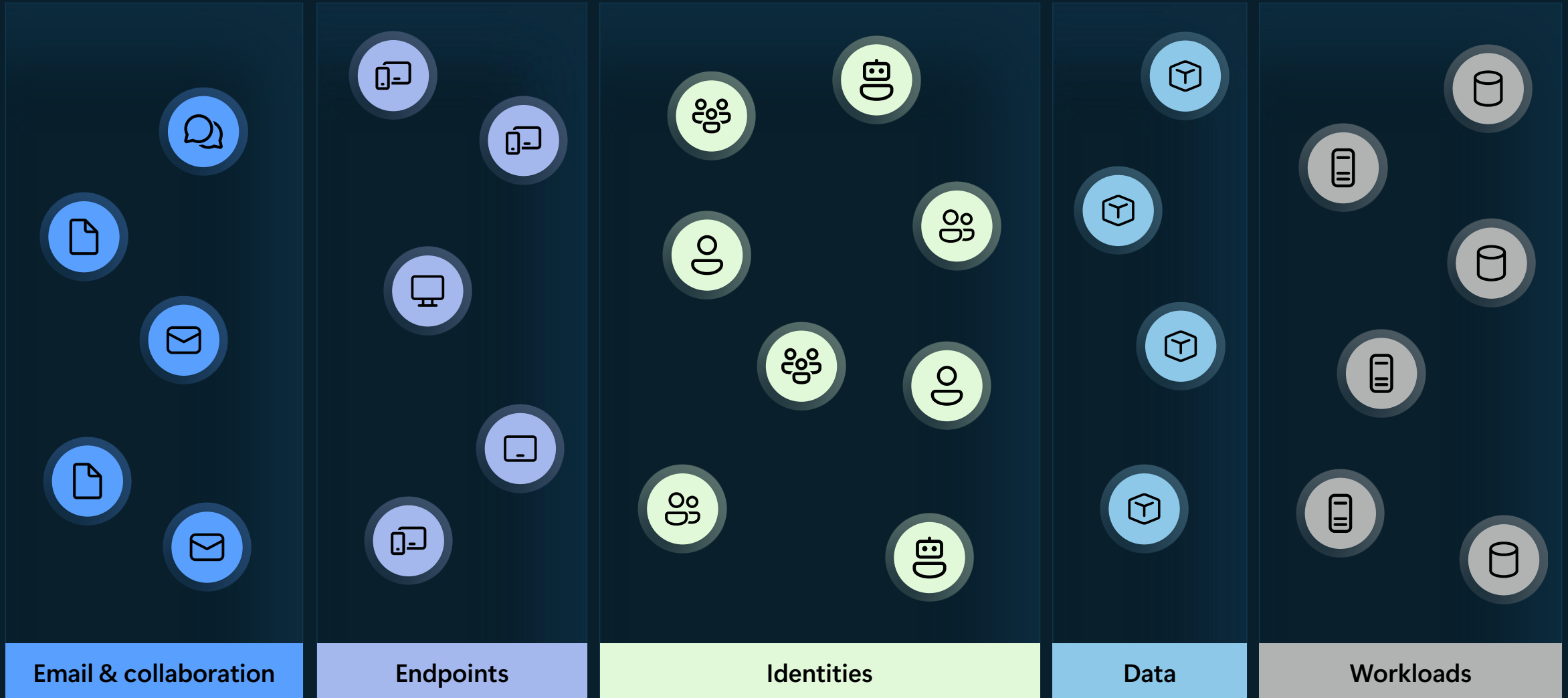
The average time to reduce exposures:

58 days

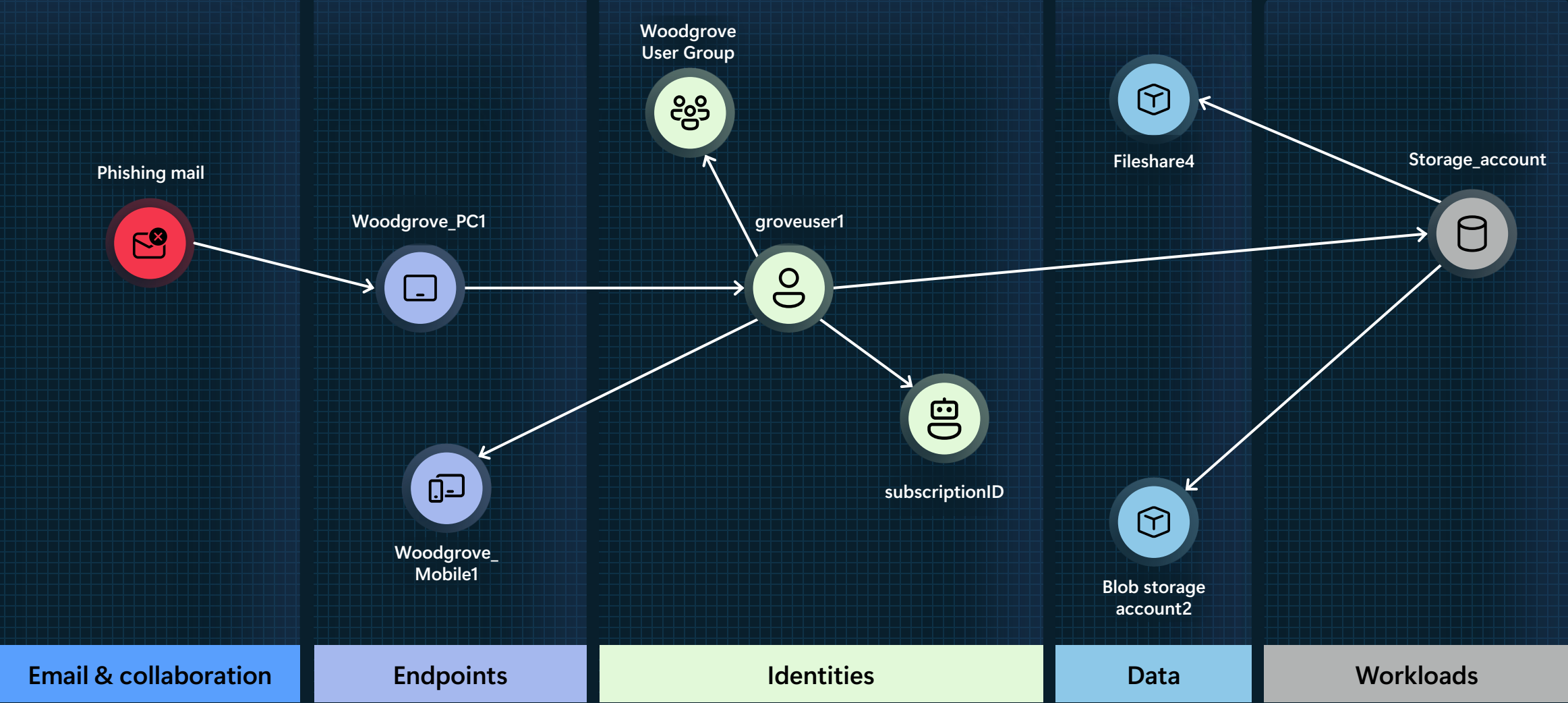
(Prioritize by risk, validate feasibility, mobilize teams)



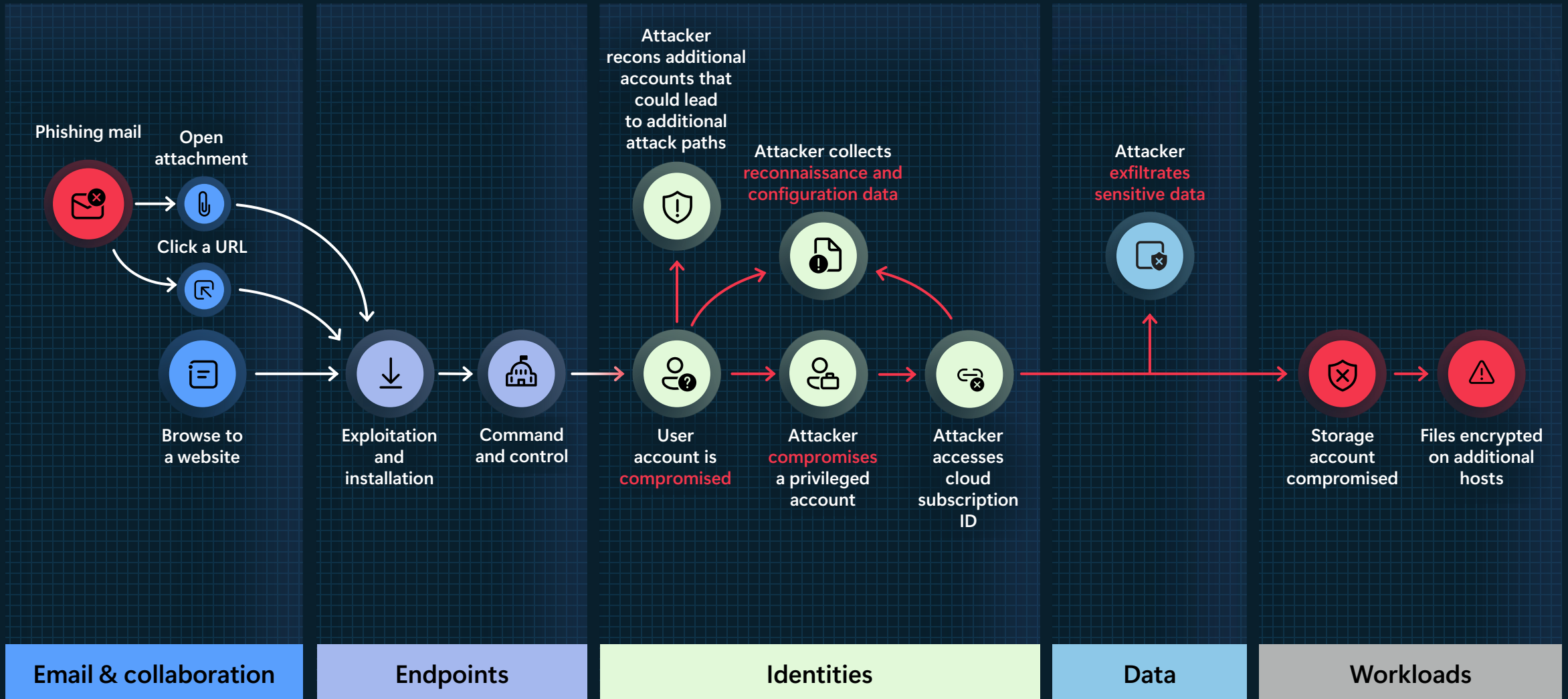
Security teams defend in silos



Attackers think in graphs, surveying potential attack paths

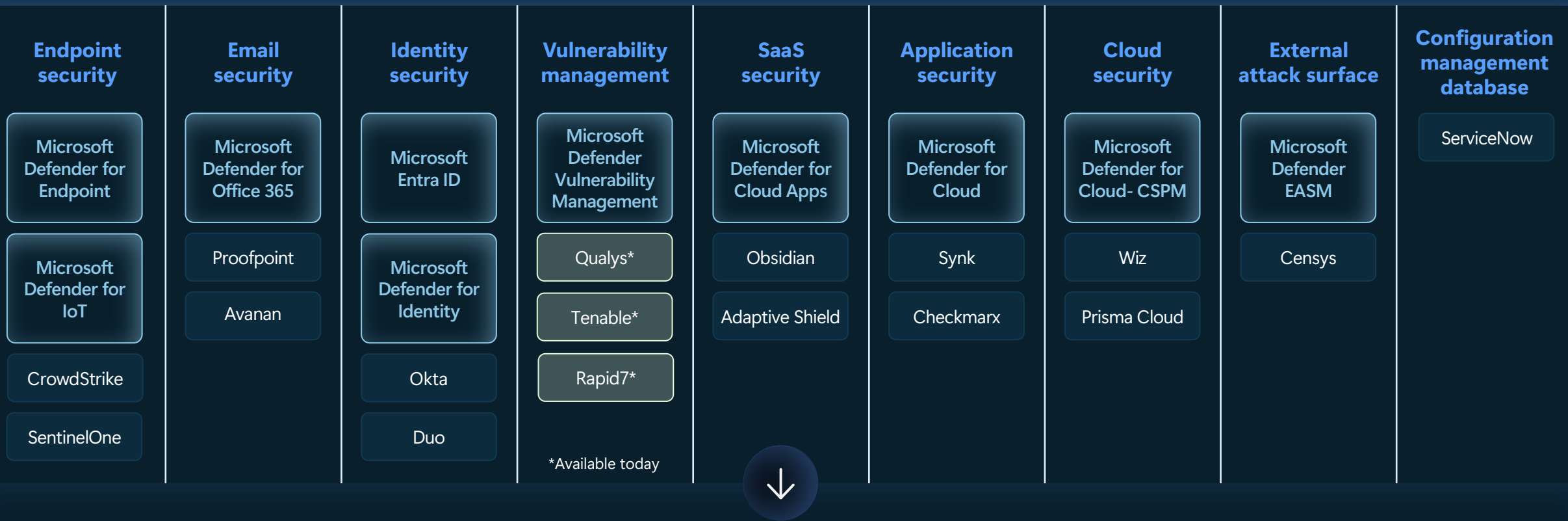


...that become successful breaches if left unaddressed



Unified asset inventory with connector ecosystem

Native integration with Microsoft security products, connectors to integrate with non-Microsoft security



Asset metadata | Operational usage | Configuration data | Policy state | Security findings | Health state

See beyond silos with the exposure graph

Collect, dedupe and normalize asset data

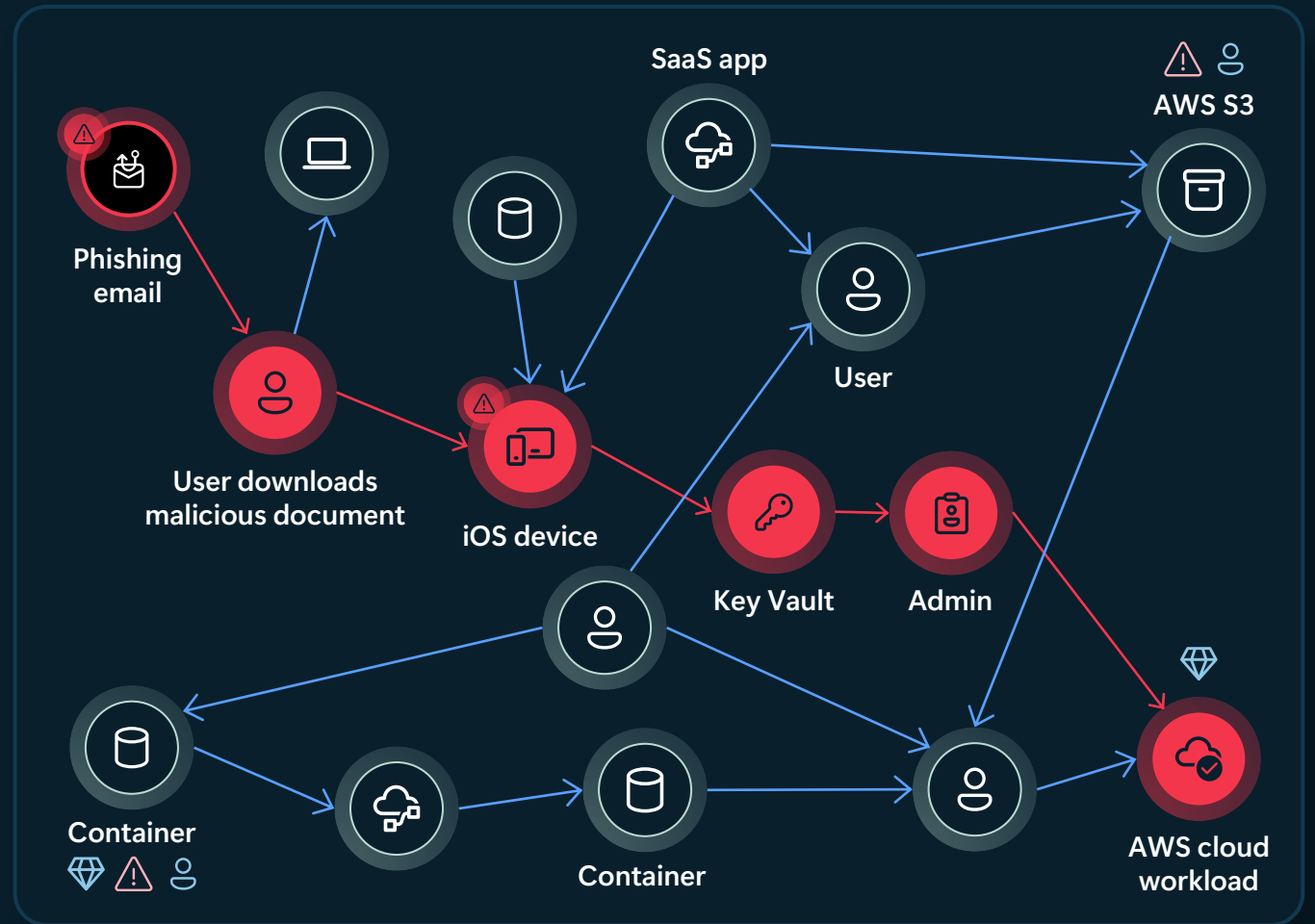
From on-premises to cloud, bring visibility into your assets to contextualize.

Map out assets and relationships

Automatically reveal unmonitored assets and map relationships to uncover gaps and risks.

Inform prioritization

Understand entire attack surface to swiftly identify, prioritize, and remediate critical issues and vulnerabilities.



⚠ Security risk 💎 Asset value 👤 Business owner → Relationship → Attack chain

Demo



Microsoft security exposure management



Measure and prioritize exposure

Turn complex security risks into
data-driven insights

Program initiatives

Track and report your risks and obtain prioritized recommendations based on your objectives

Help answer critical questions

How secure are we against a specific threat?

Where do we stand in our mitigation efforts?

Risk quantification

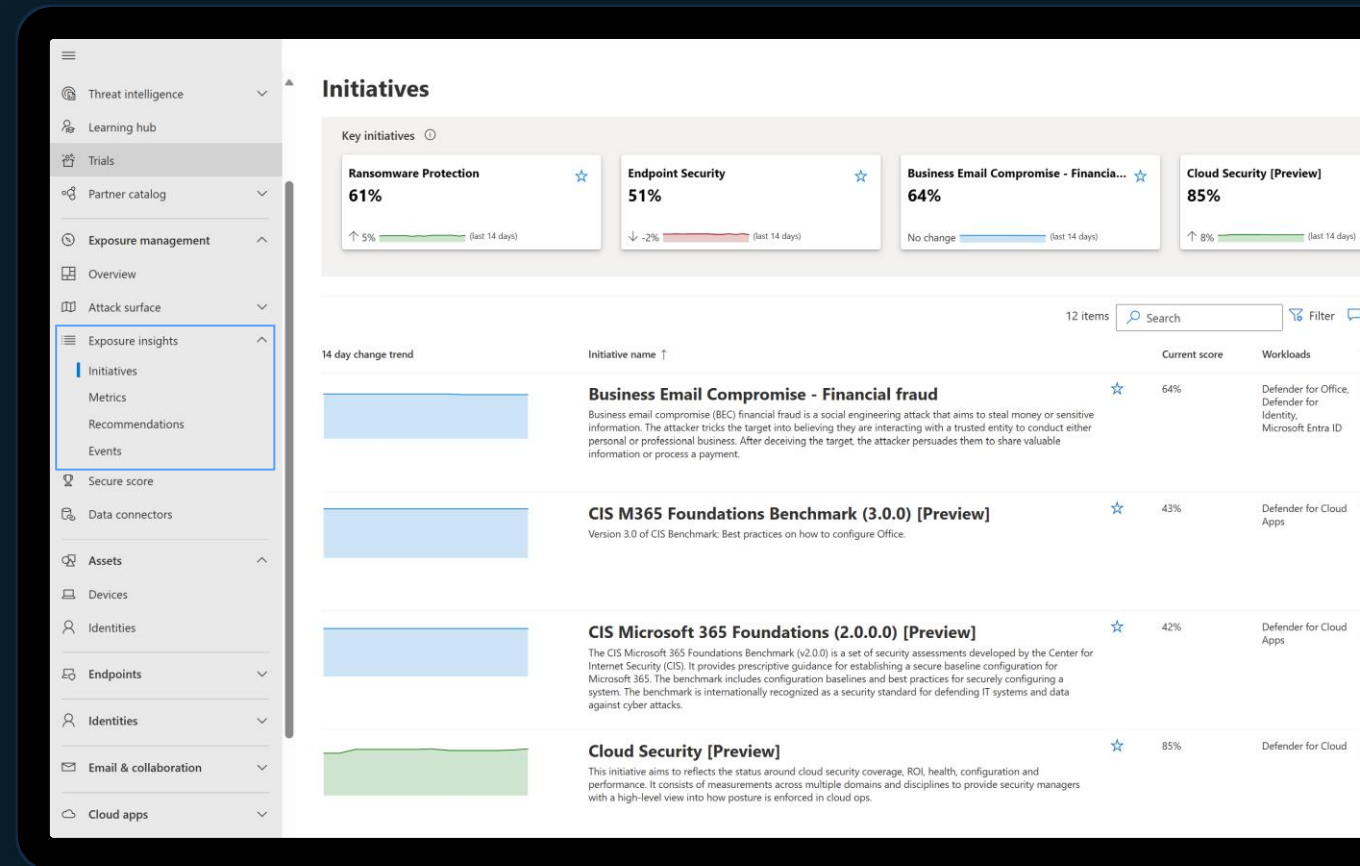
Quantify your exposure with out-of-the-box risk dashboards for your top security programs and threats.

Security metrics and recommendations

Posture and exposure recommendations across the entire attack surface in one catalog or scoped to initiatives.

Effective mobilization

Assign validated exposure findings to risk owners and validate fixes have been applied successfully.



New Unified Recommendations Catalog

One place, full coverage

All Microsoft security recommendations in a single, streamlined experience that consolidates recommendations from Secure Score, MSEM, CSPM, MDVM, more to come

Organized by attack surfaces

The catalog is divided into tabs based on attack surfaces (Devices, Cloud, Identity, SaaS Apps, and Data)

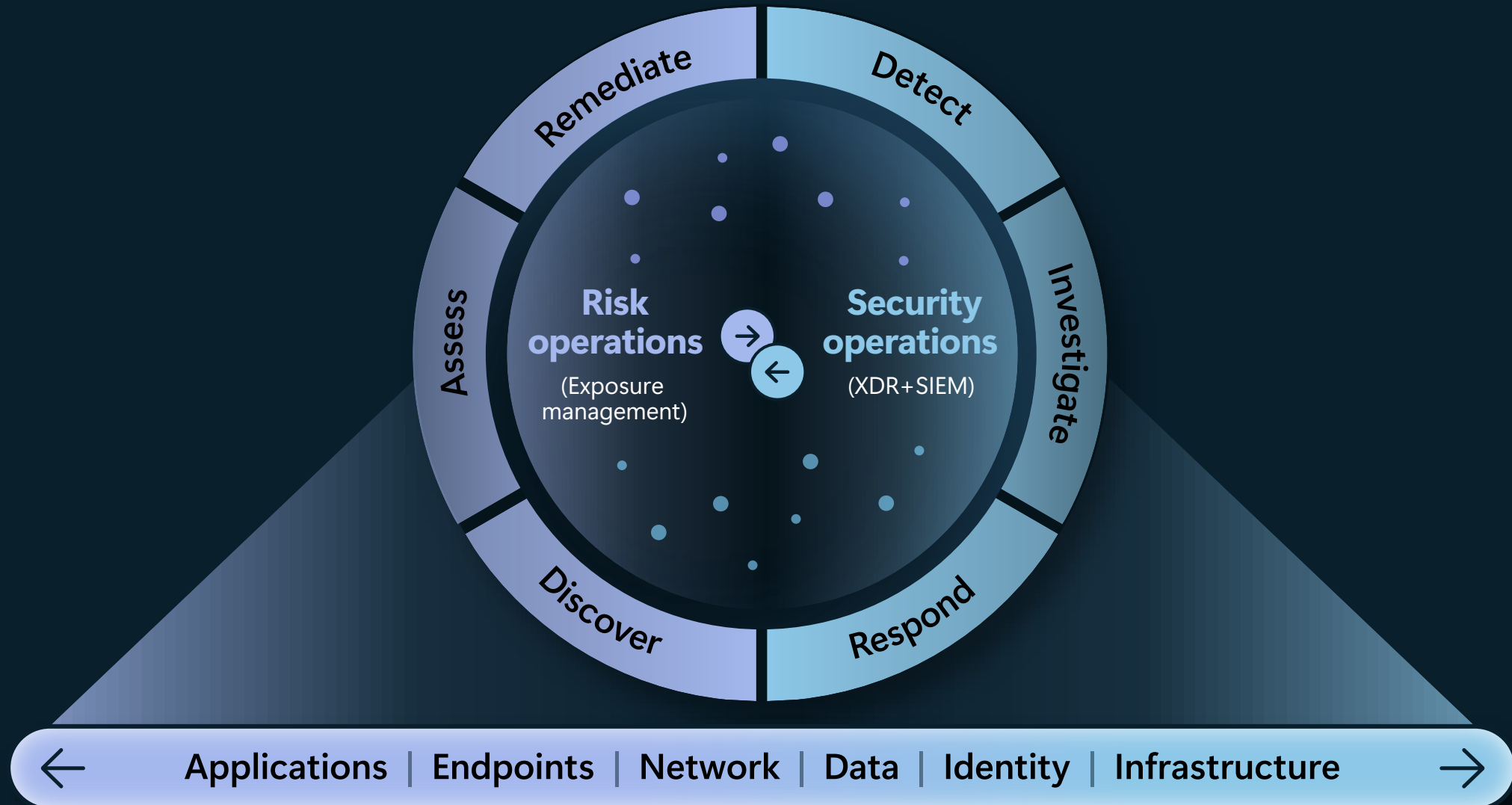
Separated workflows

Misconfiguration recommendations are separated from vulnerabilities, recognizing they represent distinct workflows handled by different personas

The screenshot displays the 'Recommendations' dashboard for the 'Cloud' attack surface. The interface includes a navigation menu on the left with options for 'All', 'Misconfigurations', 'Vulnerabilities', and 'Exposed secrets'. The main content area features a 'Recommendations summary' section with three key visualizations: a 'Cloud secure score' gauge showing a score of 72.5% (Moderate) with a 15.1% increase; a 'Score history' line chart showing an upward trend from 55 to 75 over the last 6 days; and a 'Recommendations by risk level' bar chart showing 77 critical recommendations. Below these visualizations is a table of recommendations with columns for risk level, title, exposed asset, asset risk factors, asset attack paths, and recommendation ID. The table is filtered to show 8643 items, with filters for risk level (Any), exposed asset (Any), asset risk factors (Any), and environment name (Any). The table lists several critical recommendations, such as 'API endpoints in Azure API Management should be authenticated' and 'Azure SQL Database should have Azure Active Directory Only A...'. The interface also includes an 'Export' button, a search bar, and options to customize columns and view by recommendation.

Risk level	Recommendation title	Exposed asset	Asset risk factors	Asset attack paths	Recommendation
Critical	API endpoints in Azure API Management should be authenticated	createuser	Exposure to the Int... +4	1	dilake
Critical	Azure SQL Database should have Azure Active Directory Only A... Preview	woodgrove-database	Exposure to the Int... +4	1	dilake
Critical	Storage accounts should prevent shared key access Preview	aispmdemo12	Sensitive Data +3	0	null
Critical	'dbo' user should not be used for normal service operation in S... Preview	woodgrove-users (woodgrov...	Sensitive Data +2	0	naha84@woodgro...

Strengthening the pre- and post-breach continuum



Questions?

Feedback

Help us help you!
We use your feedback to improve our trainings and
deliver content that meets your needs.
Use this link (also in the chat) to rate this training.

<https://aka.ms/MSEMComCallAsia>



Thank you

