

Advantage AI

Transforming Secops With AI to Stop Today' threats



whoami

- Principal Security Architect
- Elastic Global Security Specialists Group
- Passionate about Security Operations and Intelligence



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["CISSP", "GSOM", "Msc"]

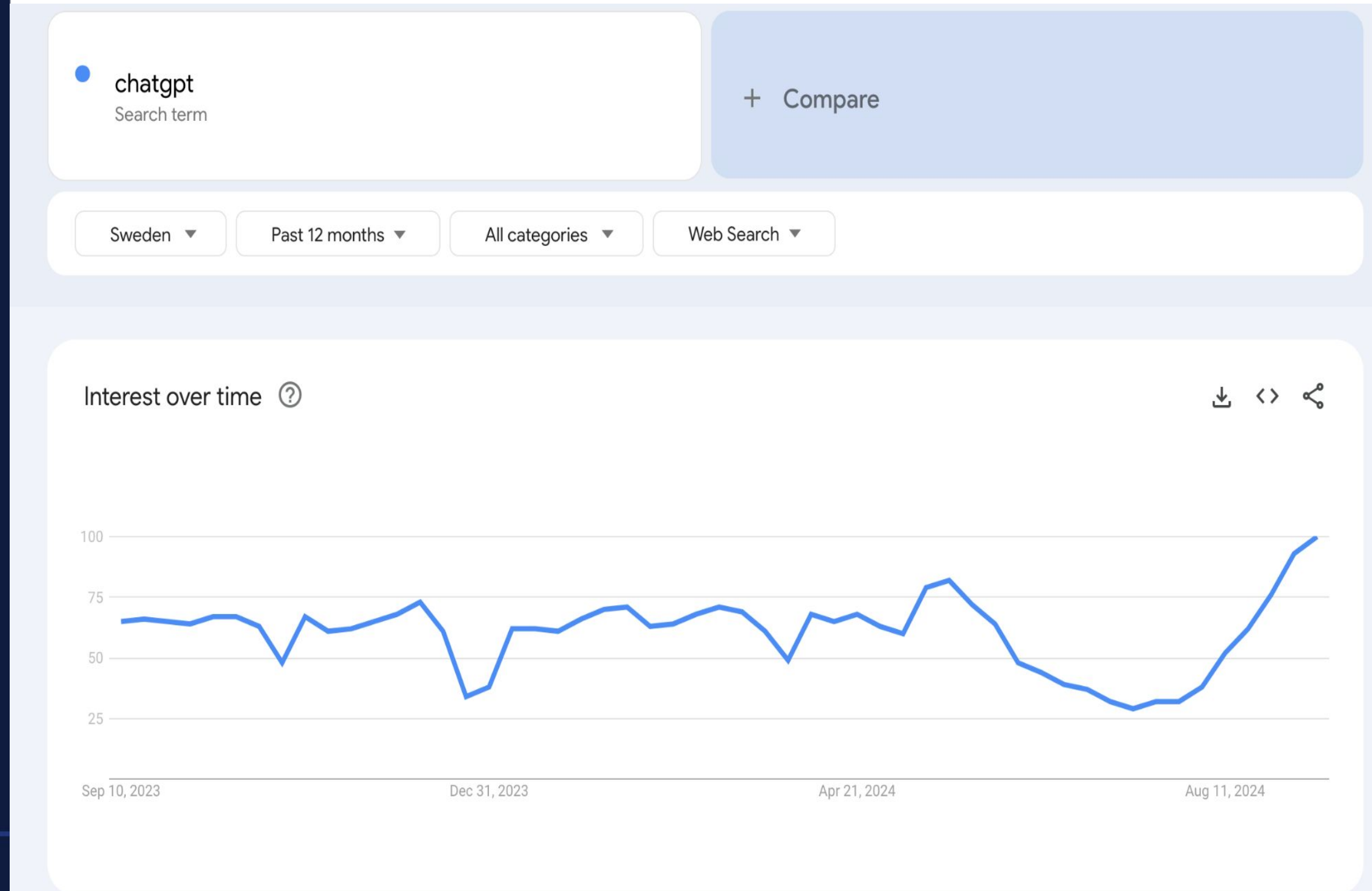
Outline

- Current trends with AI
- SOC challenges
- Where AI fits in: Workflows
- Considerations and best practices for AI adoption

One year on, where are we?

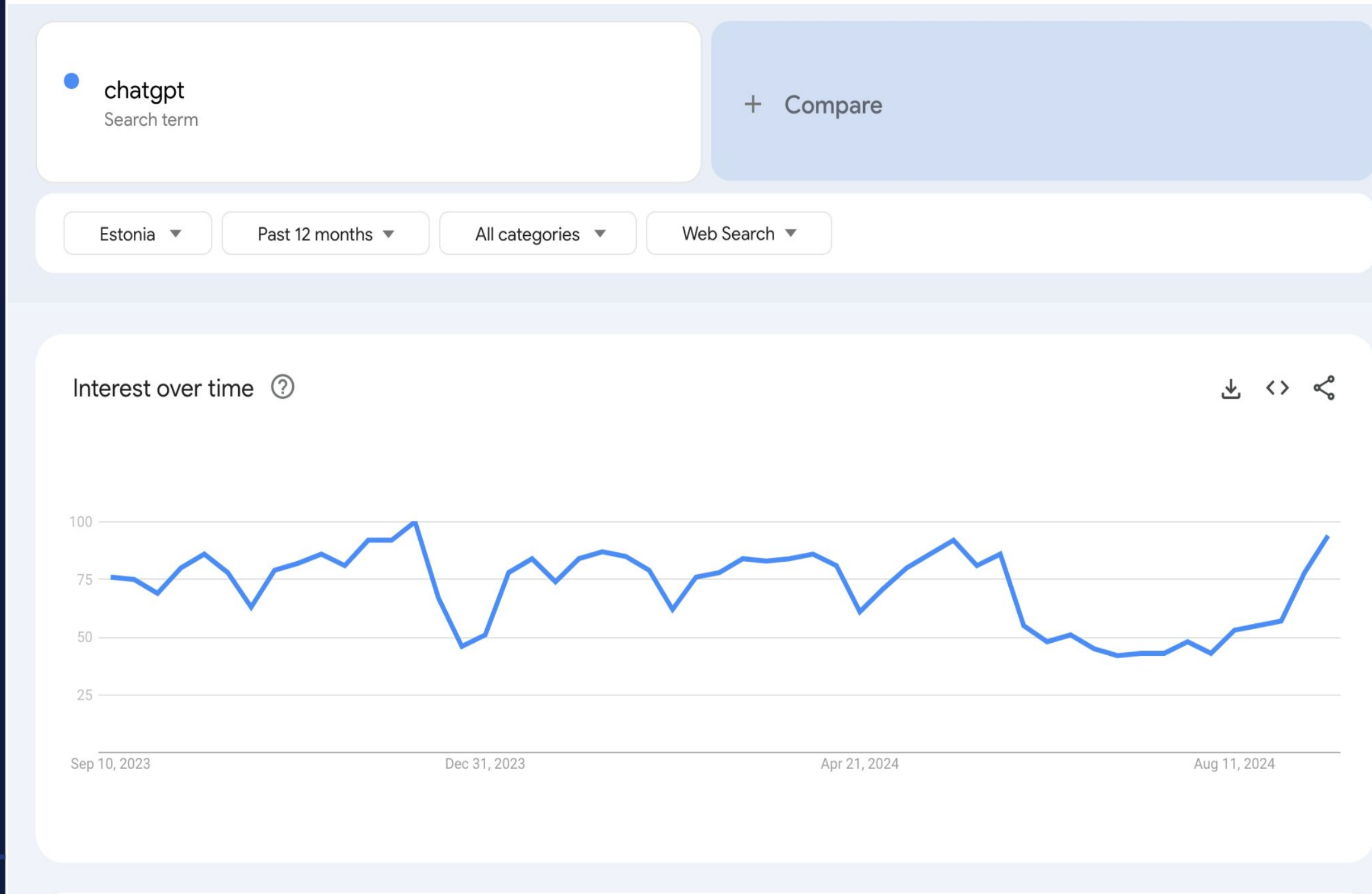
Interest in AI tools such as ChatGPT

(Sweden)



Interest in AI tools such as ChatGPT

(Estonia)



AI adoption in organizations isn't slowing down either!

Strong adoption of GenAI

42%

Actively Using and Implementing

42% of organizations are actively using and implementing LLMs

45%

Exploring Use Cases

Another 45% are exploring use cases and integration possibilities

9%

No Current Plans

Only 9% have no current plans to adopt LLMs

66

"AI won't replace humans — but humans with AI
will replace humans without AI"

- Prof. Karim Lakhani, Harvard Business School



Let's bring it to Security



What challenges is today's SOC facing?

Security operations challenges



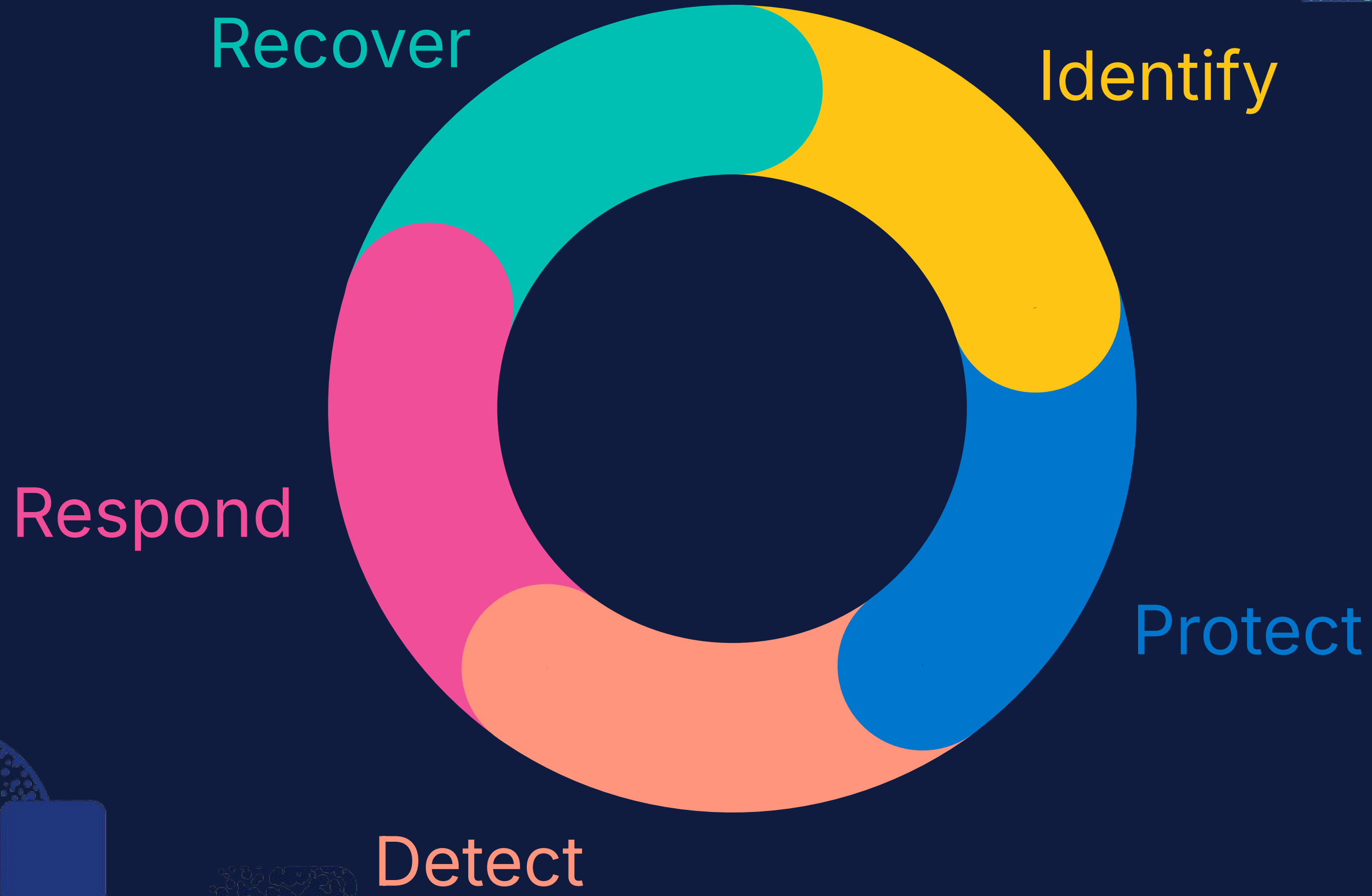
Growing attack surface



Low-fidelity detections



Overtaxed SecOps teams



Alert overload: Challenges faced by SOC teams

\$3.3B Annual cost for managing manual alert triage

4,482 Average daily alerts that SOC teams receive

3 hrs/day Time spent manually triaging the alerts

67% Alerts beyond analyst capacity

83% Reported alerts are false positives,
not worth investigating

Source: [90% of SOC analysts believe current threat detection tools are effective](#)

The AI era is here

Attacks are becoming more advanced and pervasive

- Global cybercrime ecosystem facilitates sophisticated attacks
- AI boosts social engineering, exploit development, vuln scanning & more

The SOC must counter threats to minimize damage

- Financial loss
- Operational disruption
- Exposure of sensitive data
- Reputational damage

SIEM is evolving

SIEM 1.0

The birth of SIEM

- Log centralization
- Compliance and IR focus
- Visibility for the security team

Legacy

SIEM 2.0

Detections, Machine Learning, Automation, and Orchestration

- Finding threats missed by others
- ML augments rules-based detection
- UEBA added as a core use case
- Facilitating response and remediation workflows
- TDIR emerges (Threat Detection, Investigation, and Response)

Recent

SIEM 3.0

Generative AI Revolution

- Accelerating existing teams with AI-driven workflows
- Addressing the skill gap challenge
- Democratizing security

Future

AI-driven security analytics

Powered by the Elastic Search AI Platform



Accelerate onboarding of
custom data sources



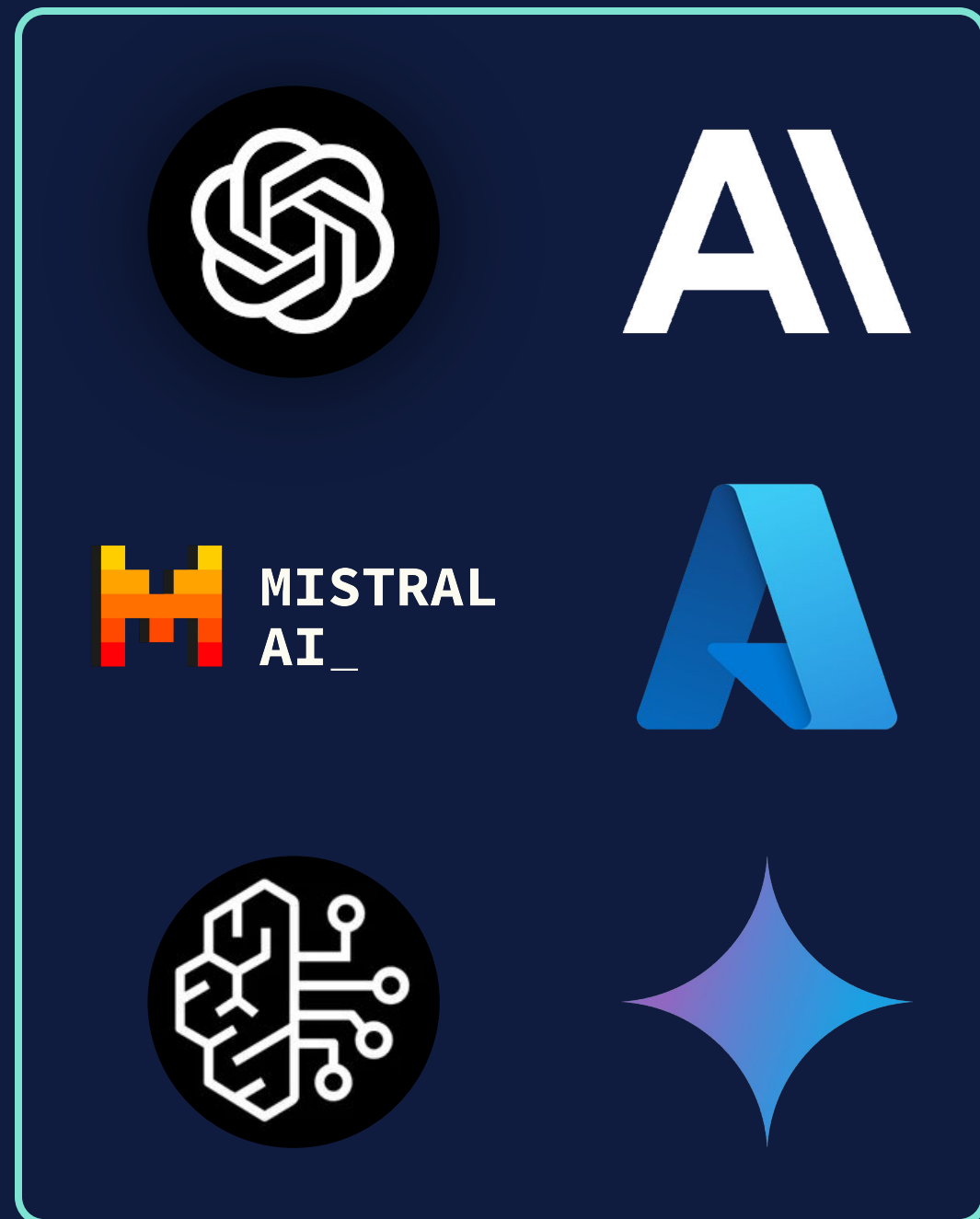
Triage a flood of alerts down
to the attacks that matter



Augment expertise to boost
SOC productivity

Unlock generative AI for your SOC

Open LLM ecosystem



Retrieval augmented generation



Real-time visibility



Security and privacy

NEW

ACCELERATE DATA ONBOARDING

Automatic Import

- Create custom data integrations in minutes, not days
- Extend visibility beyond Elastic's 400+ prebuilt data integrations
- Reduce the cost, complexity, and stress of SIEM migration

The screenshot displays the 'Review' step of an integration setup process. At the top, a progress bar shows four stages: Connector, Integration, Data stream, and Review (the current step, indicated by a circled '4'). Below the progress bar, the 'Review results' section contains a text prompt: 'Review all the fields and their values in your integration. Make any necessary adjustments to ensure accuracy.' and an 'Edit pipeline' button.

The main content is a table of integration fields with a search bar at the top. The table has two columns: 'Name' and 'Value'. The data is as follows:

Name	Value
teleport.teleport.mfa_device.mfa_device_type	TOTP
teleport.teleport.mfa_device.mfa_device_uuid	d07bf388-af49-4
teleport.teleport.mfa_device.mfa_device_name	otp-device
event.code	T1000I
event.created	2024-02-23T18:
event.action	user.login
event.id	b675d102-fc25-
event.category	authentication
event.type	start
user.name	teleport-admin

At the bottom of the table, there is a 'Rows per page: 10' dropdown and a pagination control showing page 2 of 3.

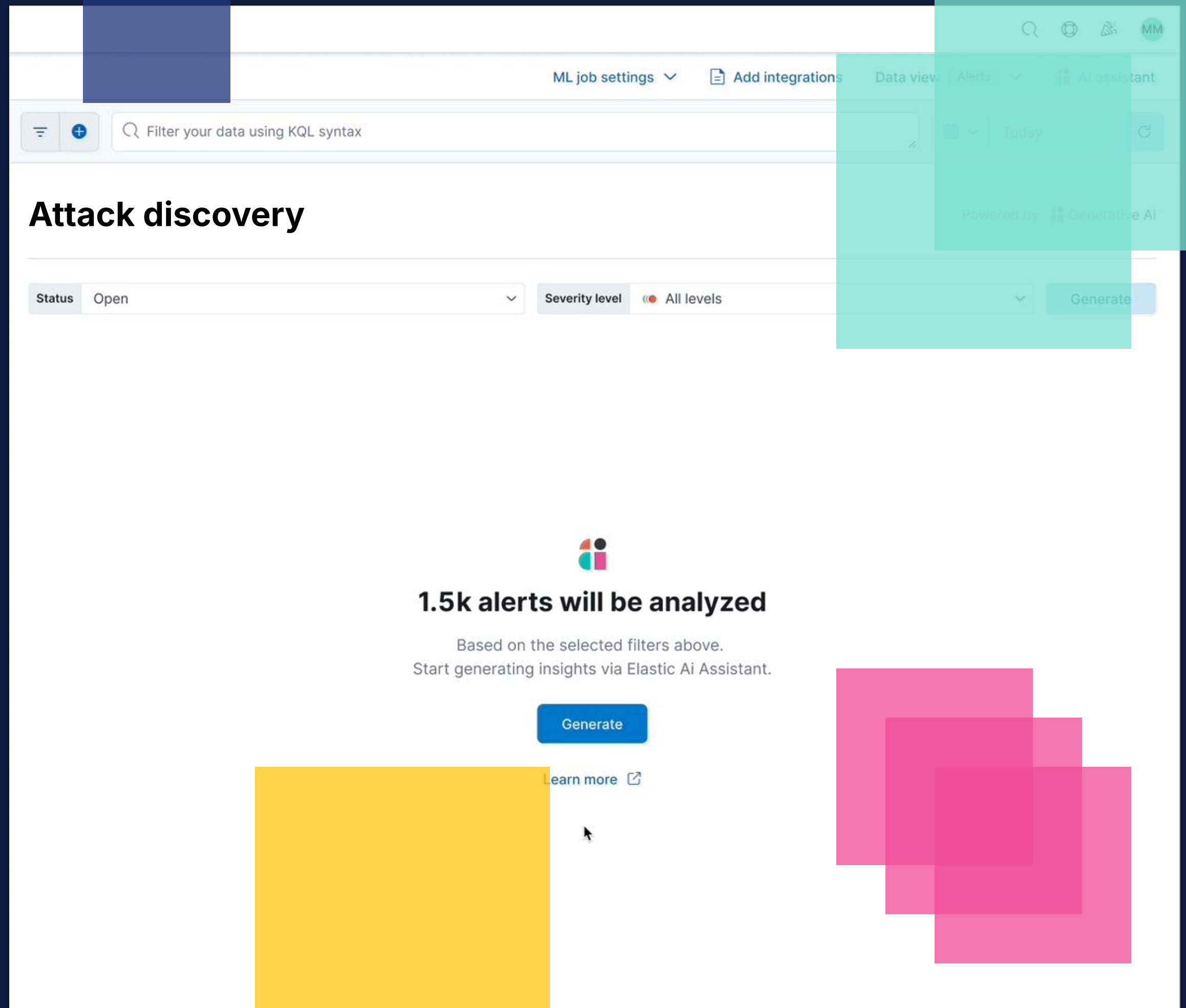
Overlaid on the right side of the screenshot is a 'Create new integration' modal. It features a header with a colorful icon and the text 'Create new integration'. Below the header, it says: 'Start an AI-driven process to build your integration step-by-step, or upload a .zip package of a previously created integration'. Below this text is a grid of nine integration options, each with a logo and a brief description:

- APM**: Collect performance metrics from your applications with Elastic APM.
- Elastic Defend**: Protect your hosts and cloud workloads with threat prevention, detection, and deep security data visibility.
- Web crawler**: Add search to your website with the web crawler.
- 1Password**: Collect logs from 1Password with Elastic Agent.
- AbuseCH**: Ingest threat intelligence indicators from URL Haus, Malware Bazaar, and Threat Fox feeds with Elastic Agent.
- Active Directory Entity Analytics**: Collect User Identities from Active Directory Entity with Elastic Agent. (Technical preview)
- ActiveMQ**: Collect logs and metrics from ActiveMQ instances with Elastic Agent.
- Aerospike Metrics**: Collect metrics from Aerospike servers with Metricbeat.
- Airflow**: Airflow Integration. (Technical preview)

AUTOMATE TRIAGE

Attack Discovery

- Prioritize attacks, not alerts
- Assess alerts holistically, rather than as a succession of one-off events
- Get guidance on what to do next, ask follow-up questions, and take immediate action

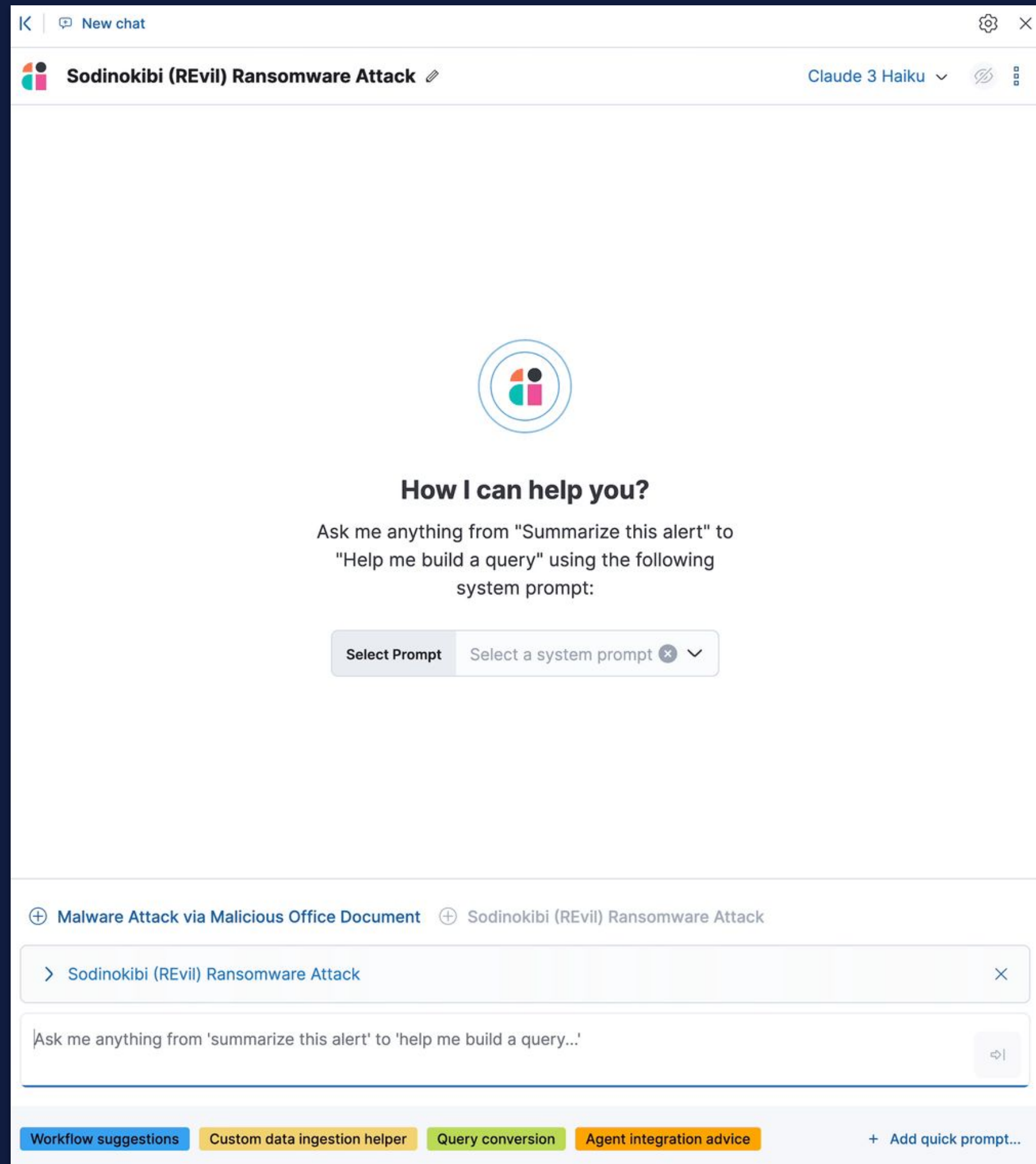


The screenshot displays the Elastic Attack Discovery interface. At the top, there are navigation links for 'ML job settings', 'Add integrations', 'Data view', 'Alerts', and 'AI assistant'. A search bar prompts users to 'Filter your data using KQL syntax'. Below this, the 'Attack discovery' section features filters for 'Status' (set to 'Open') and 'Severity level' (set to 'All levels'). A prominent callout box states: '1.5k alerts will be analyzed. Based on the selected filters above. Start generating insights via Elastic Ai Assistant.' A blue 'Generate' button is visible, along with a 'Learn more' link. The interface is overlaid with decorative colored shapes: a blue square at the top left, a yellow square at the bottom left, and several pink squares at the bottom right.

EMPOWER PRACTITIONERS

AI Assistant

- Make every user a power user
- Guide analysts through triage, investigation, and response
- Help admins with routine tasks



The screenshot shows a chat window titled "Sodinokibi (REvil) Ransomware Attack" using "Claude 3 Haiku". The chat content includes:

How I can help you?
Ask me anything from "Summarize this alert" to "Help me build a query" using the following system prompt:

Select Prompt Select a system prompt × ▾

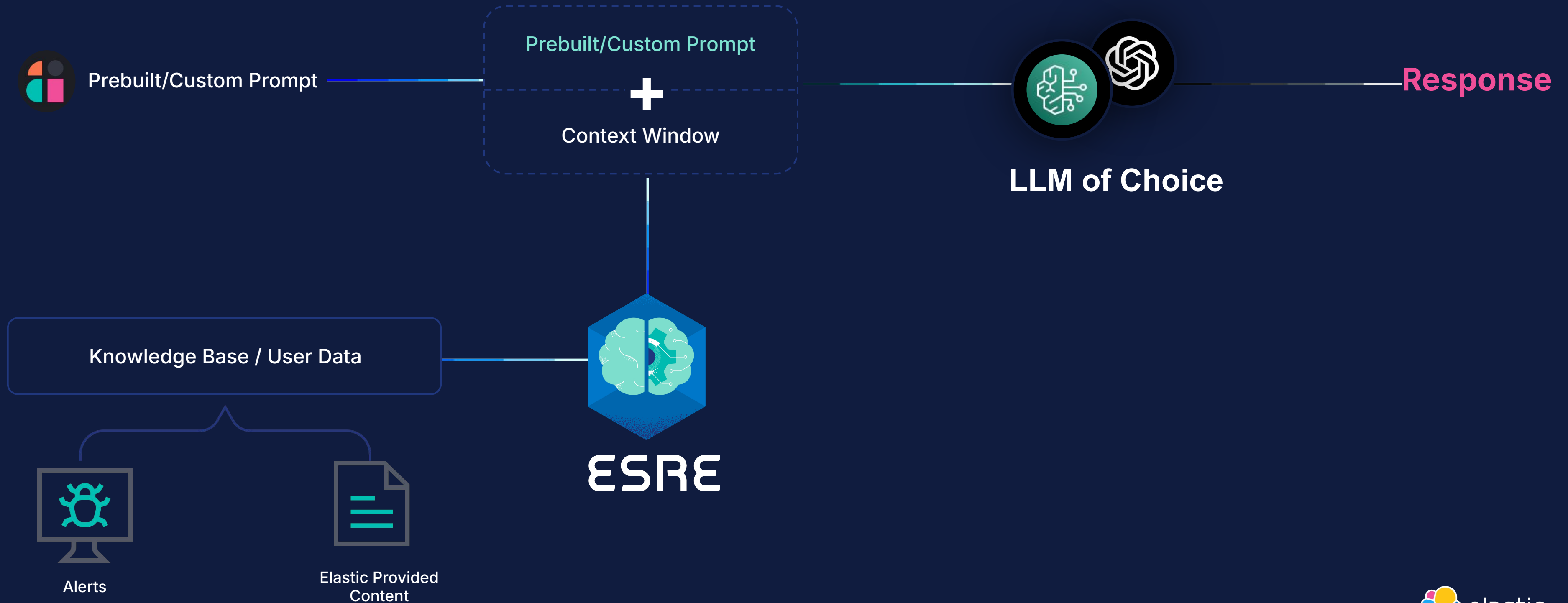
Malware Attack via Malicious Office Document Sodinokibi (REvil) Ransomware Attack

> Sodinokibi (REvil) Ransomware Attack ×

Ask me anything from 'summarize this alert' to 'help me build a query...'

Workflow suggestions Custom data ingestion helper Query conversion Agent integration advice + Add quick prompt...

Elastic AI Assistant - Behind the Scenes





All this is great, but is AI
safe to use?



As with most things, there are always risks

The steps we can take include:

- Ensuring data privacy and confidentiality
- Human validation
- Informed choice of LLM
- Adherence to governance and regulation
- Employee training and awareness



Security can be a bear...

Elastic Security can help.

- Arm every analyst
- Accelerate security workflows
- Improve security posture
- Optimize security budgets
- Centralize security operations

Thank You!

Visit our booth!

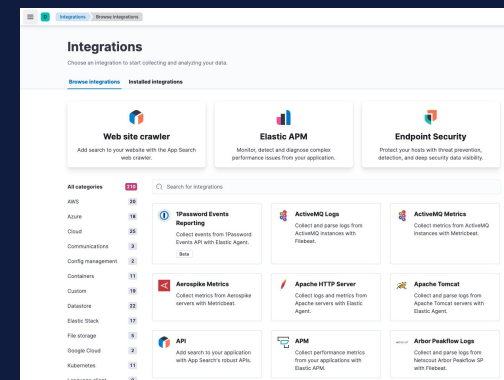




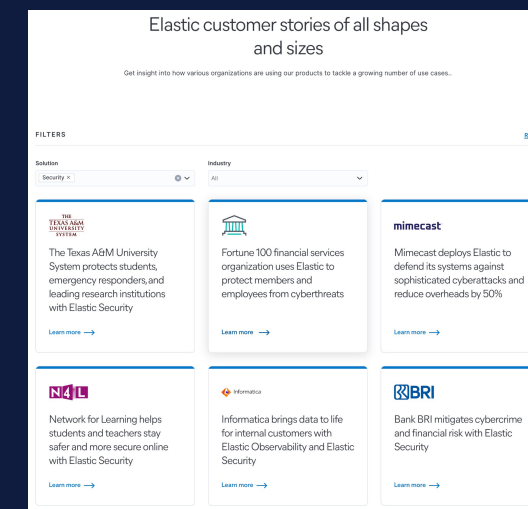
For more information



Download the Elastic security labs Global Threat Report elastic.co/security-labs



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