Security Monitoring Using Splunk Cookbook

Proven recipes for improving the security posture

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During the course of this presentation, we may make forward-looking statements regarding future events or plans of the company. We caution you that such statements reflect our current expectations and estimates based on factors currently known to us and that actual events or results may differ materially. The forward-looking statements made in the this presentation are being made as of the time and date of its live presentation. If reviewed after its live presentation, it may not contain current or accurate information. We do not assume any obligation to update any forward-looking statements made herein.

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Agenda

1) The Need
I'm hungry!

2) Challenges
Too many options

3) Our Journey
Ingredients

4) Solutions
Recipe

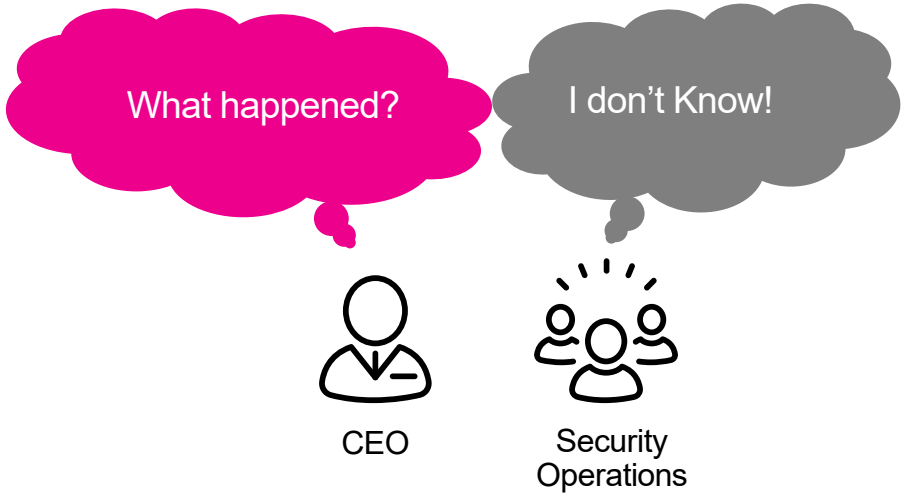
5) Benefits
The Taste

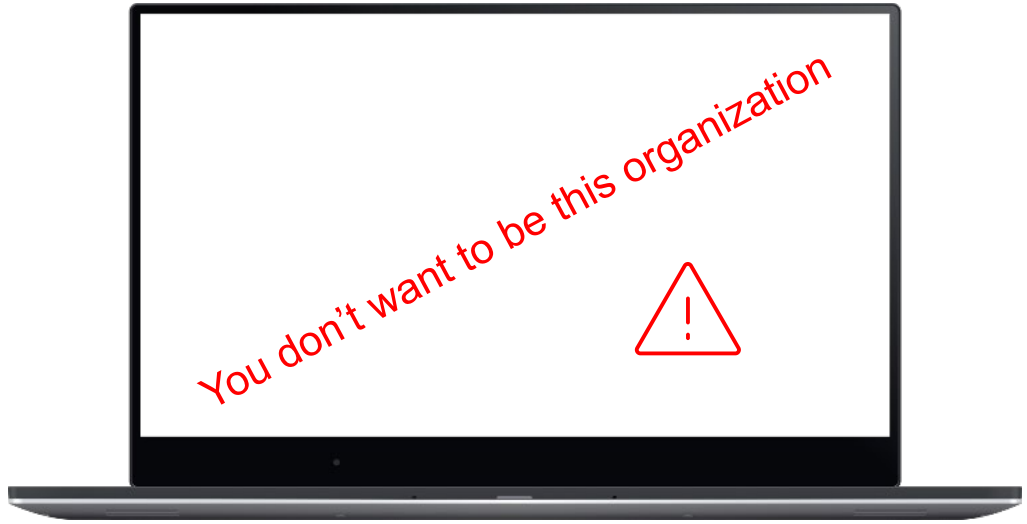
The Need – Why SIEM

Types of Organizations

Breached!

Don't know they have been breached!





That's where Splunk SIEM helps….

Common Myths and Facts

Myth	Fact
Just Network perimeter devices will suffice my security needs	Two thirds of security administrators admit that security intelligence platform is required. **SIEM solution has become mandatory to protect network from attacks**
Enterprise Security is only about compliance requirement for yearly audit	Top enterprises believe that security goes beyond yearly audit reports **Continuous monitoring is essential to secure the Enterprise systems**

Data Breach Statistics

Size of the problem

71%

Data breaches were financially motivated

52%

Breaches featured hacking

4.1B

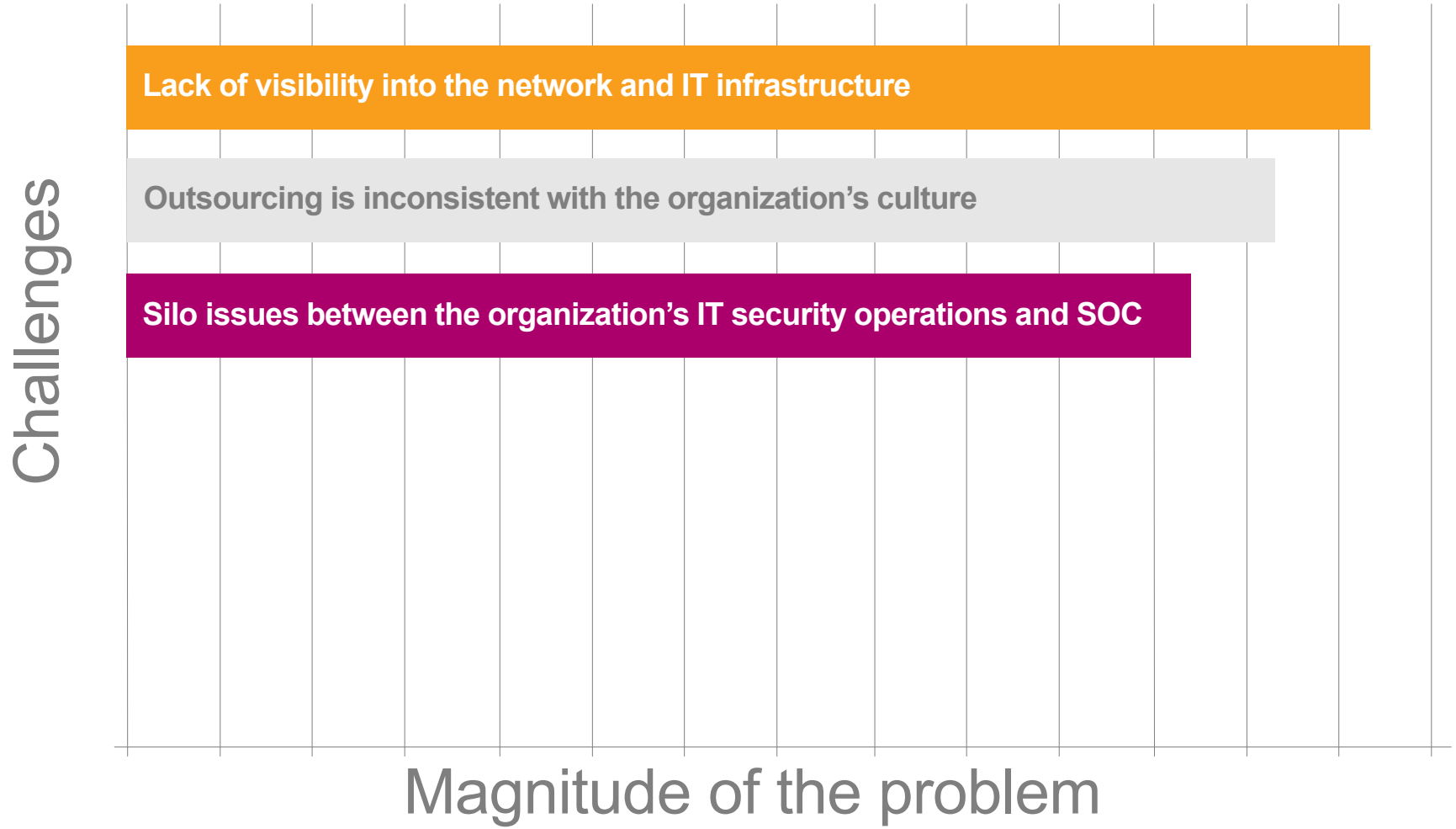
Records exposed by data breaches

3.92M

Average cost of a data breach

Challenges and the Need to Address Them

Problems in the general security set up



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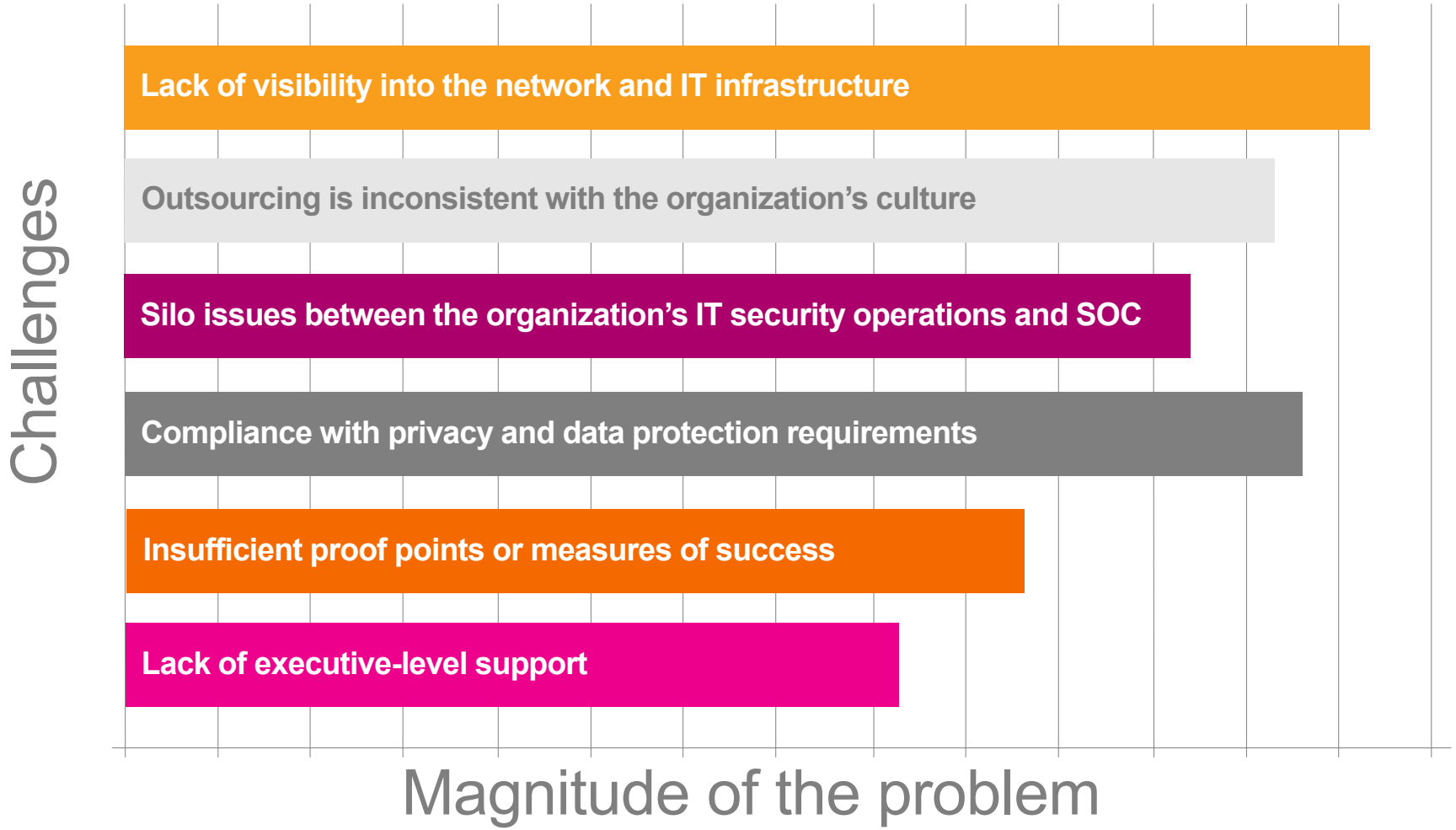

Our Journey and Experience

Observations and lessons learnt

Choose on-premise or cloud
Ample third part connectivity options

Plan for required license & storage
Importance relative to feasibility & affordability

No luxury to on-board everything
Not just a log management arena

Decide Most Valuable Resources
On-board them first

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On-board them first

Add context & use frameworks
Assets, Identities, Threat Intelligence, Risk, etc.

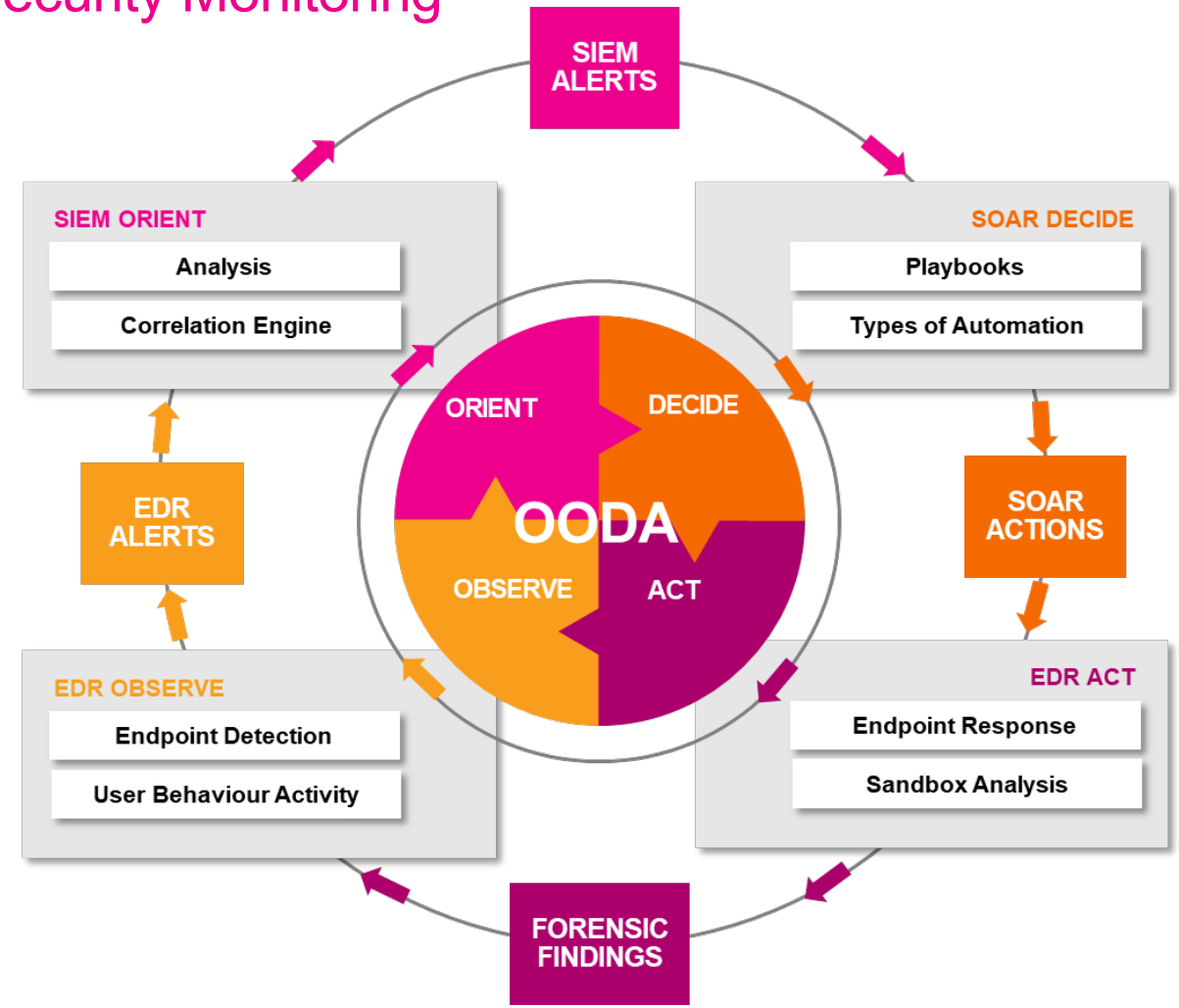
Identify crucial use case scenarios
Wider coverage versus depth

Watch Splunk Security Domains
Content updates is a starting point

Choose the battles
Be a Security advisor first

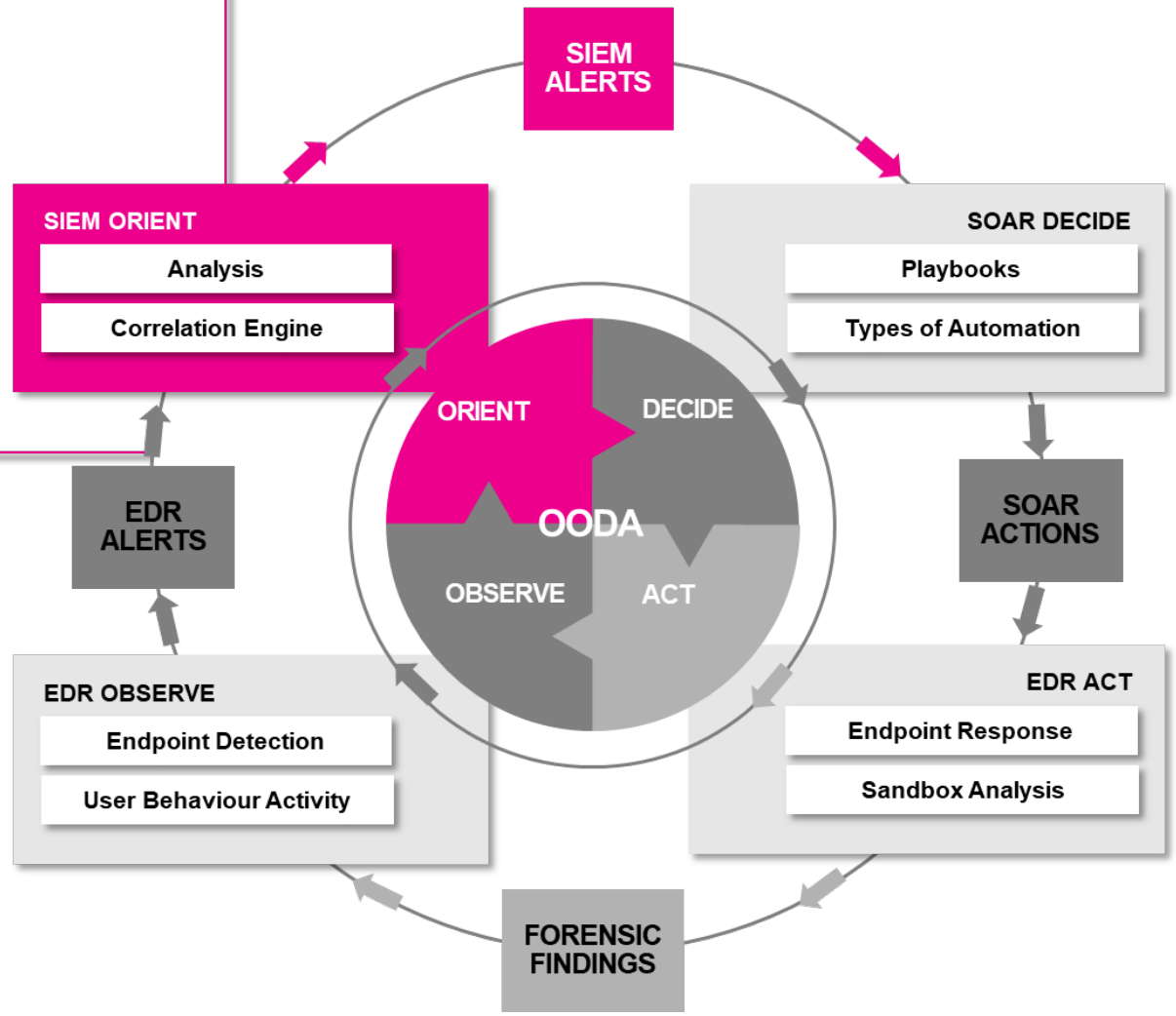
Decision Making Methodology

Applying OODA to Security Monitoring

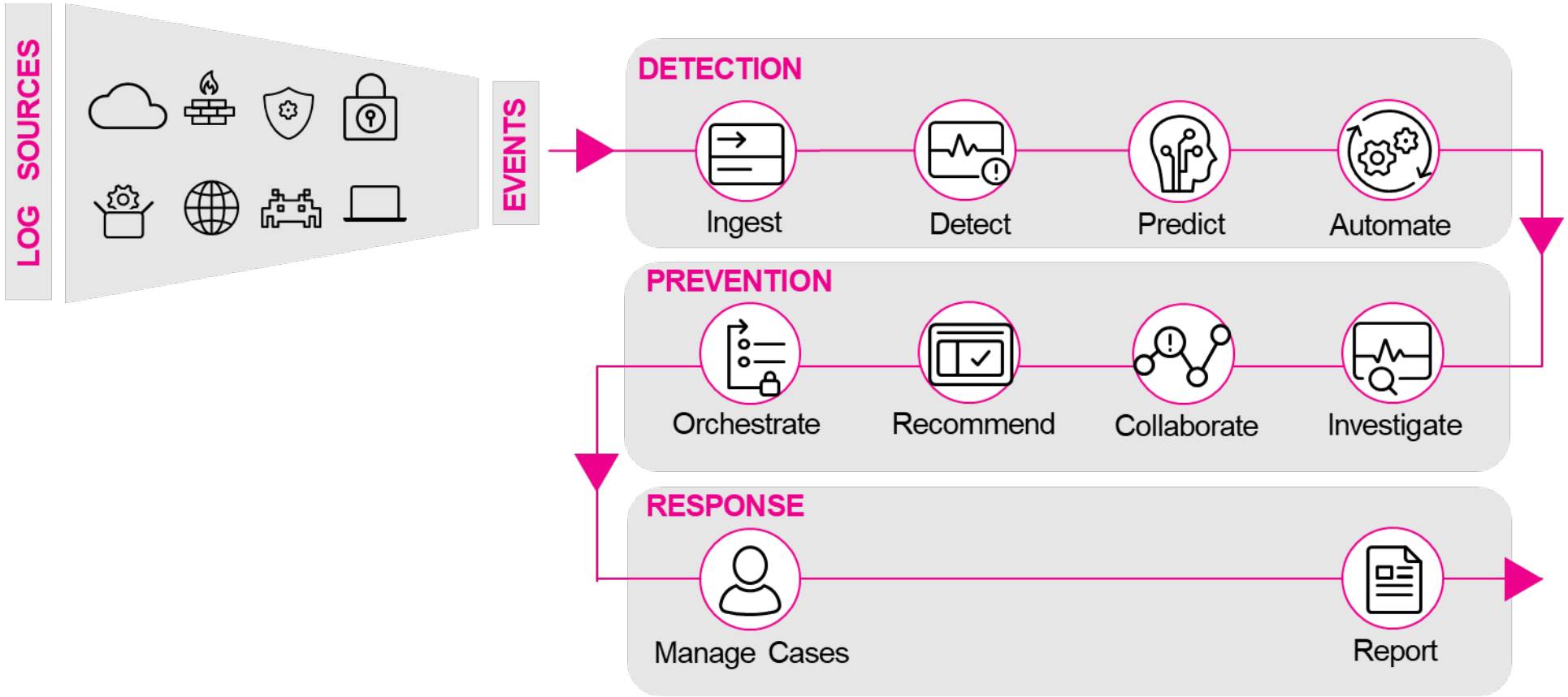


… with Focus on SIEM

- Security analytics
- Use case management
- Incident management
- Threat Intelligence
- Adaptive response
- Log Source Correlation
- User Behaviour Analytics
- Vulnerability Management

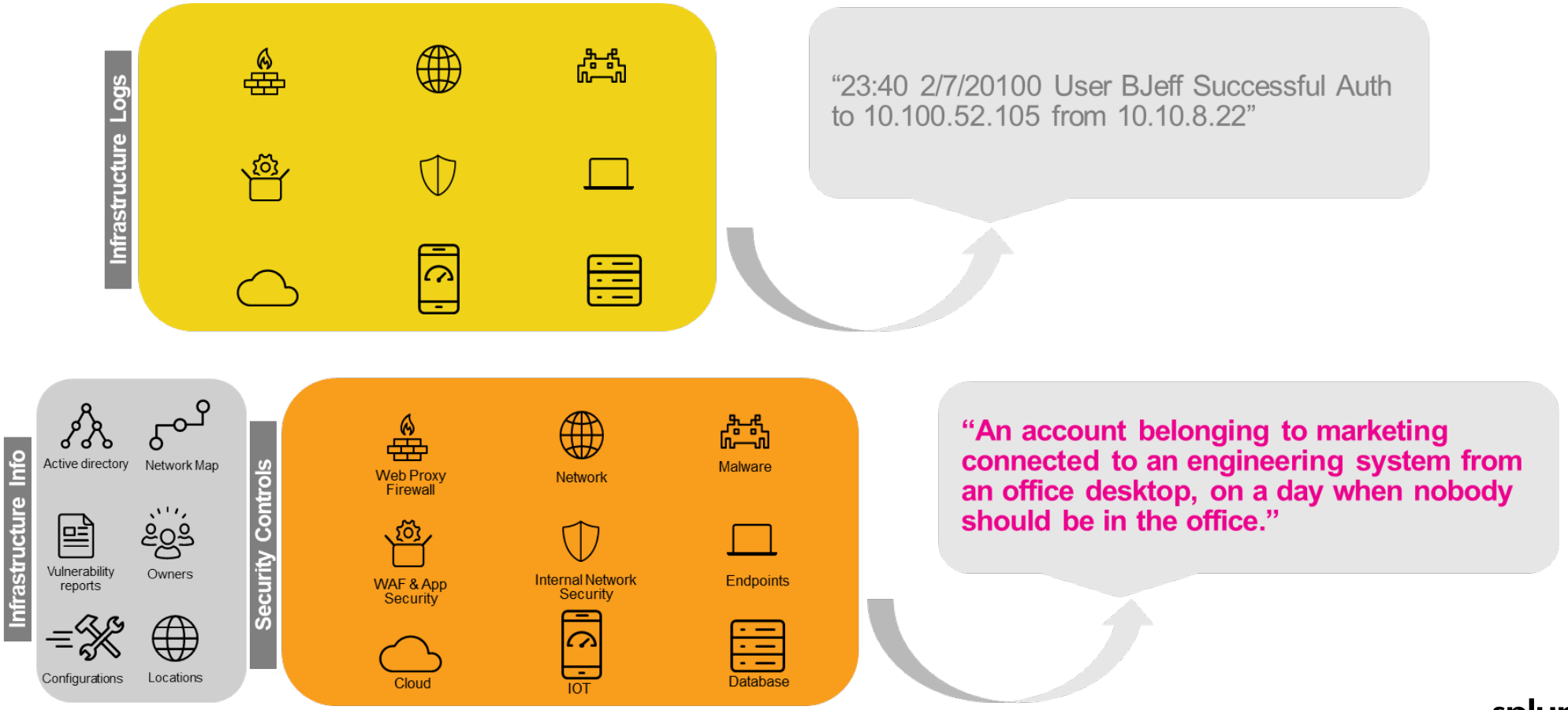


10 Building Blocks of Detection & Response



Logs, Alerts and Context to it

Adding clarity to detection of ‘An anomalous authentication event’



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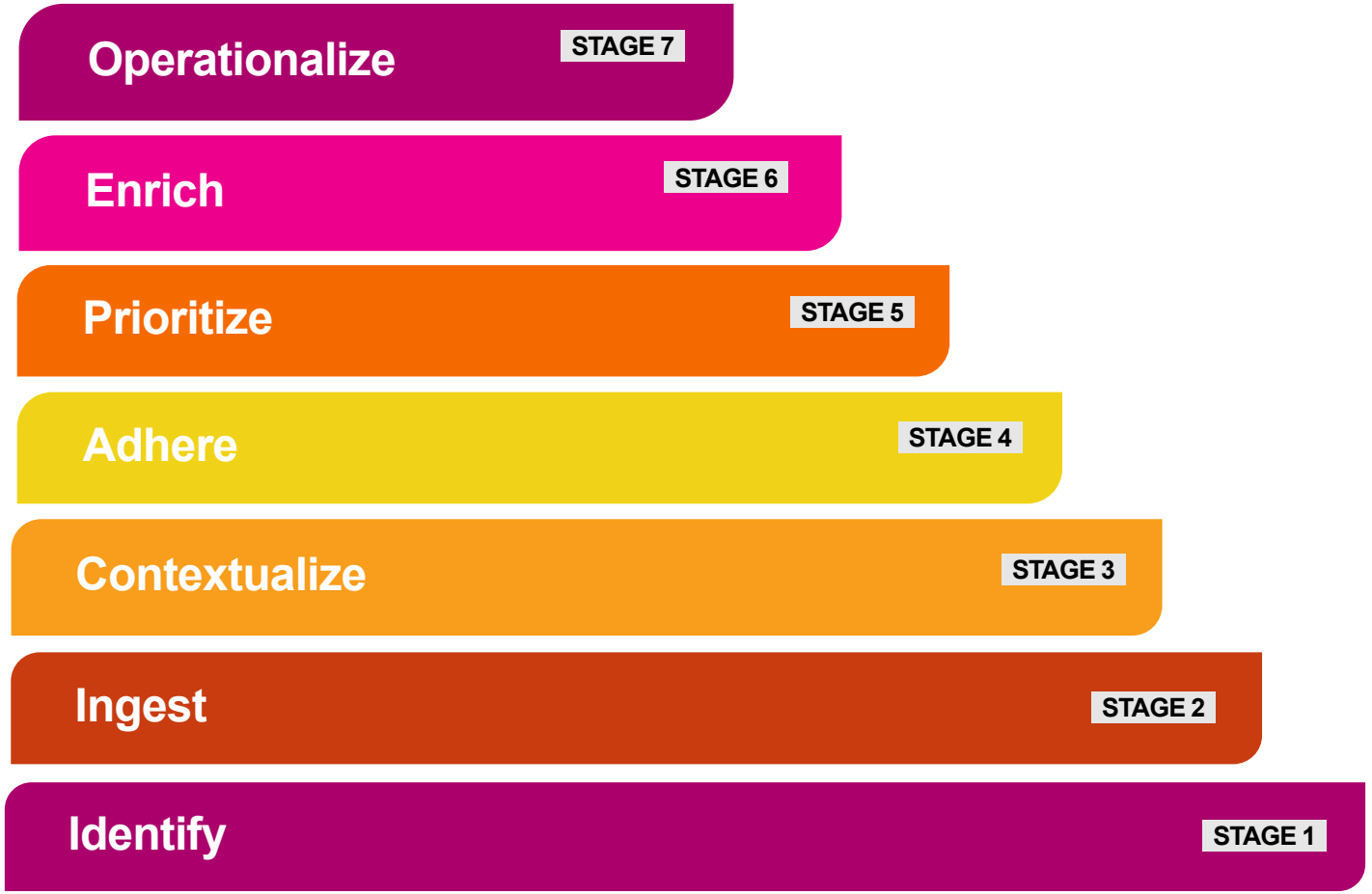
Choose Critical Yet Achievable Scenarios

7 stages to choose achievable scenarios



Choice of Security Use Case Scenarios

Limit numbers and reduce alert fatigue

Major business risks to be addressed

Response mechanisms available

Availability of Logs & Security events

Use Case Scenario Selection

Ideal approach

Business Needs

- Splunk Security Domains
- Framework Mapping

Feasibility

- Available Logs
- Relevant events

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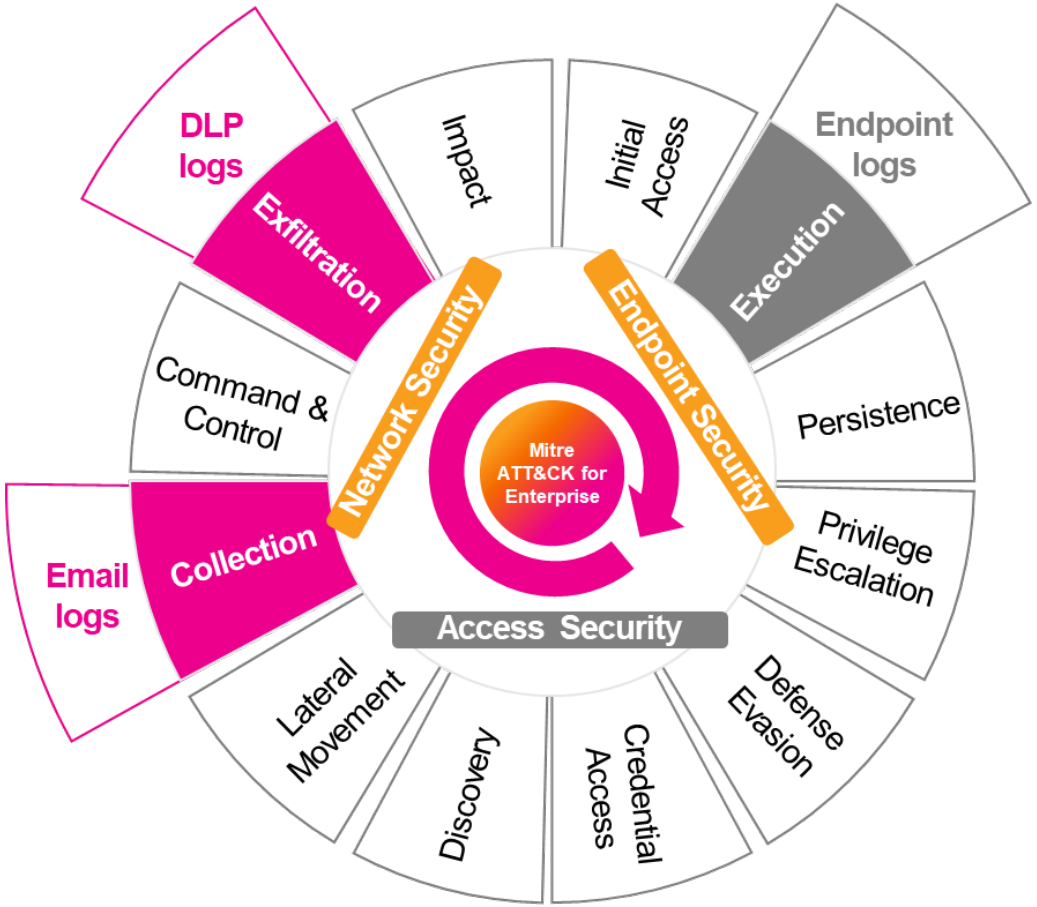

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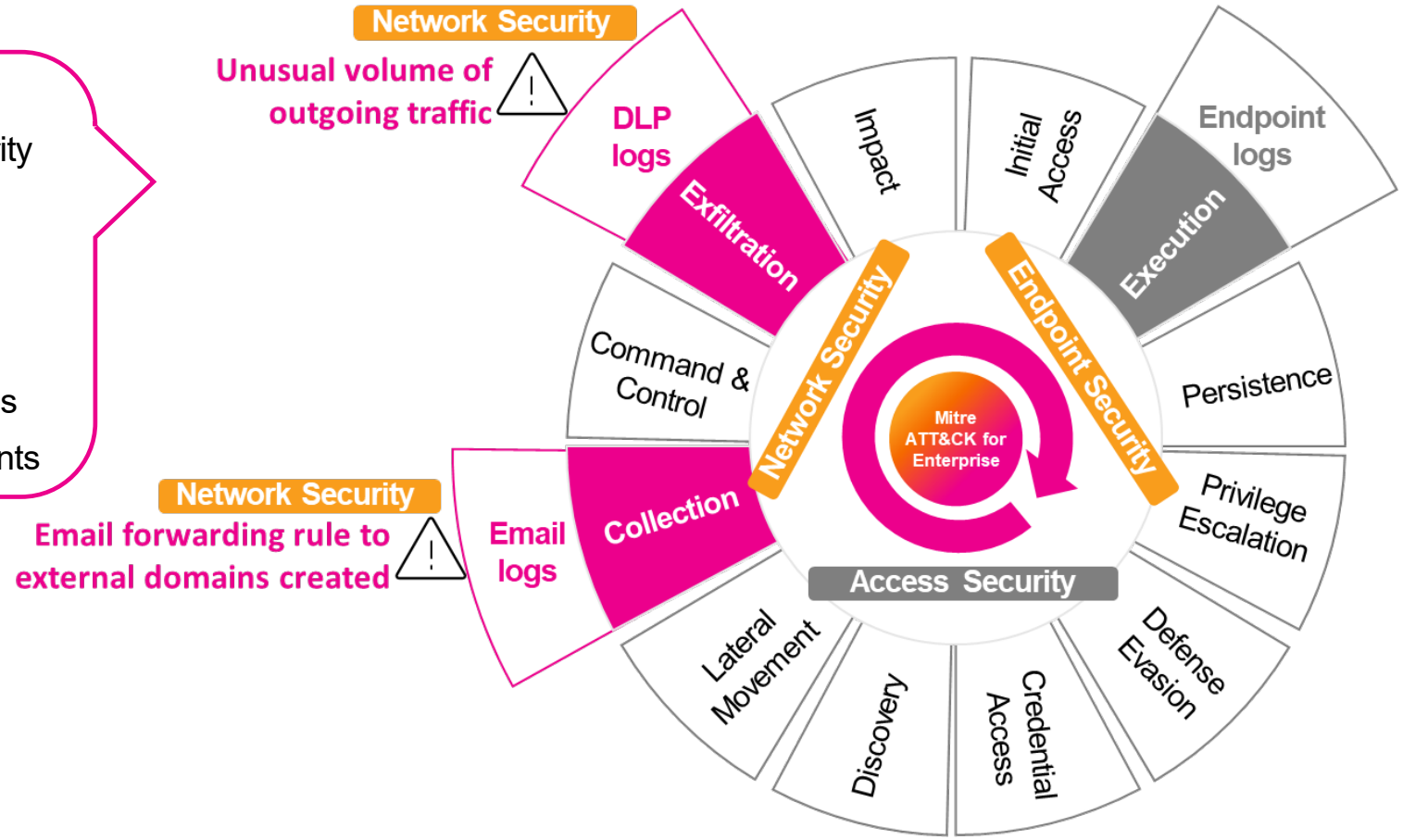


Security Posture Key Indicators

Threat Activity

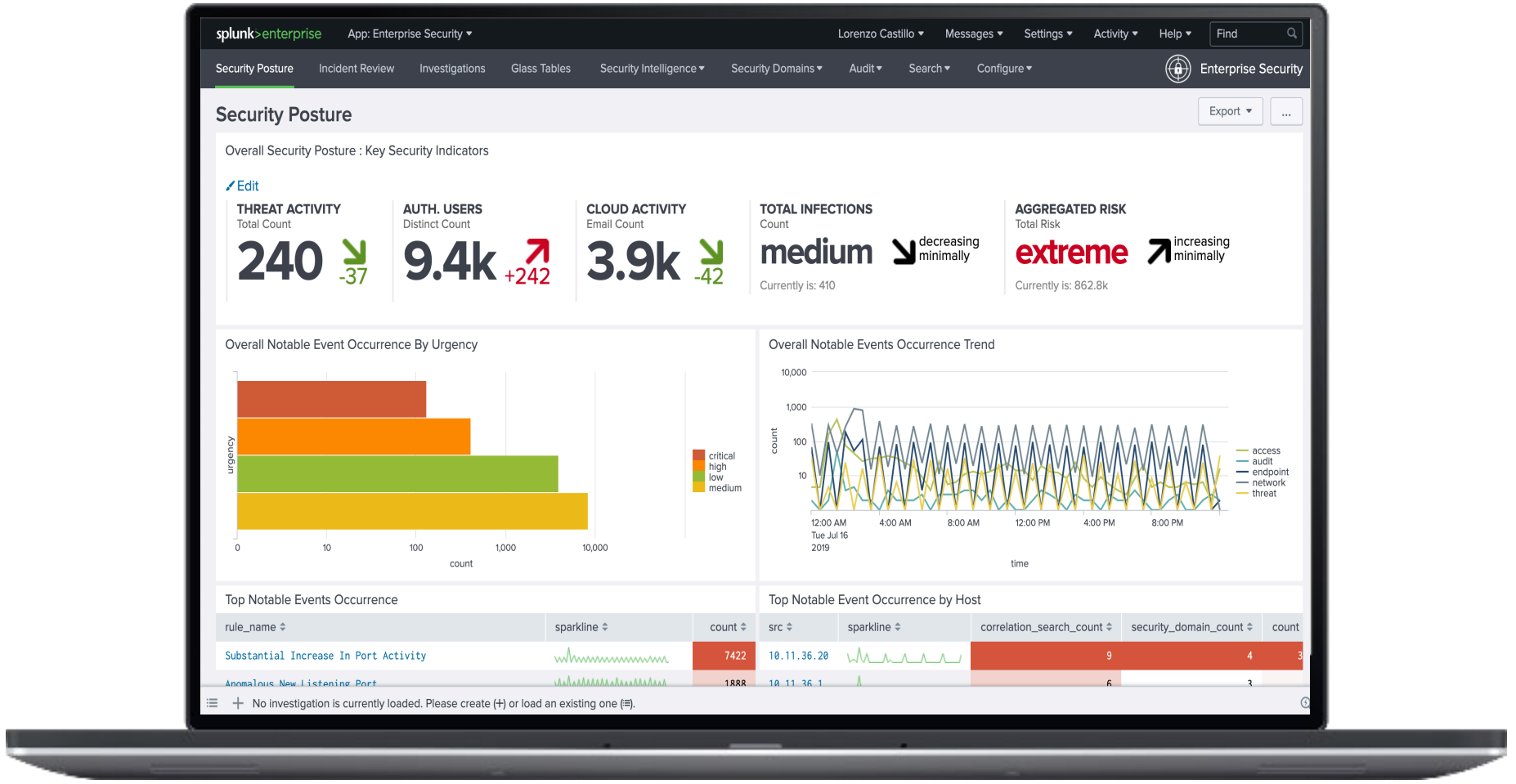
Affected users

Endpoint Activity

Network Activity

Audit events

Notables



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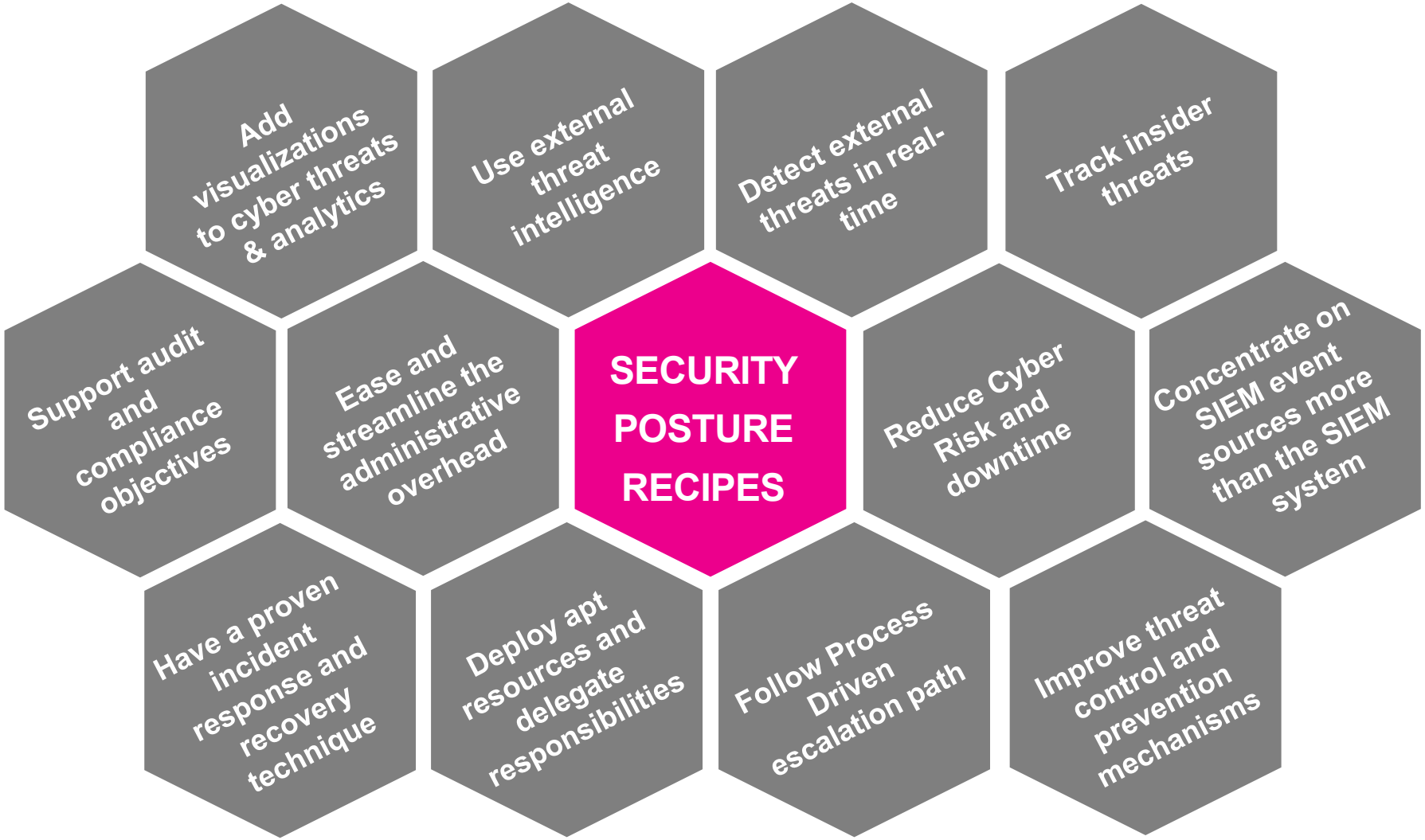
Security Posture – Recipes



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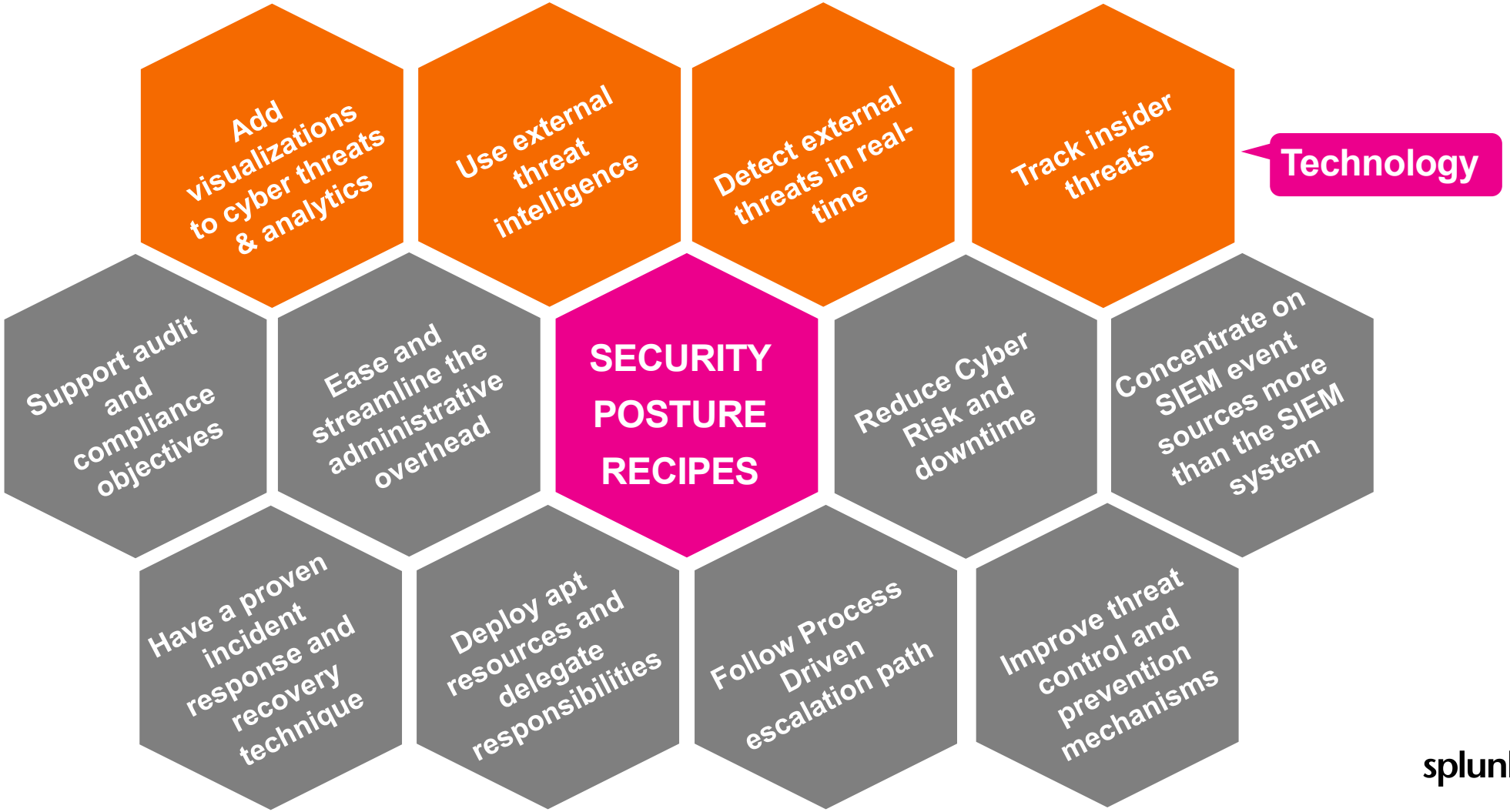

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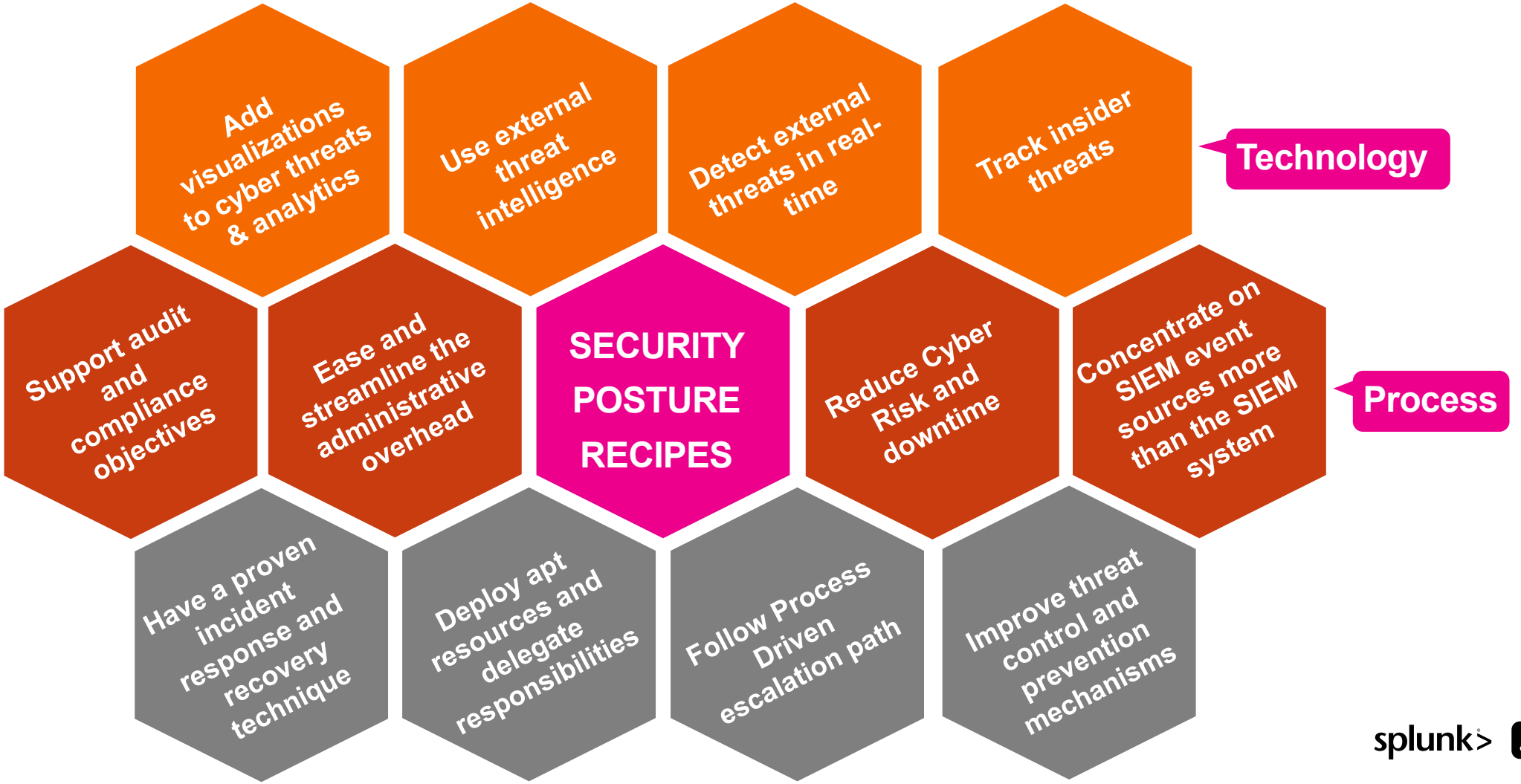

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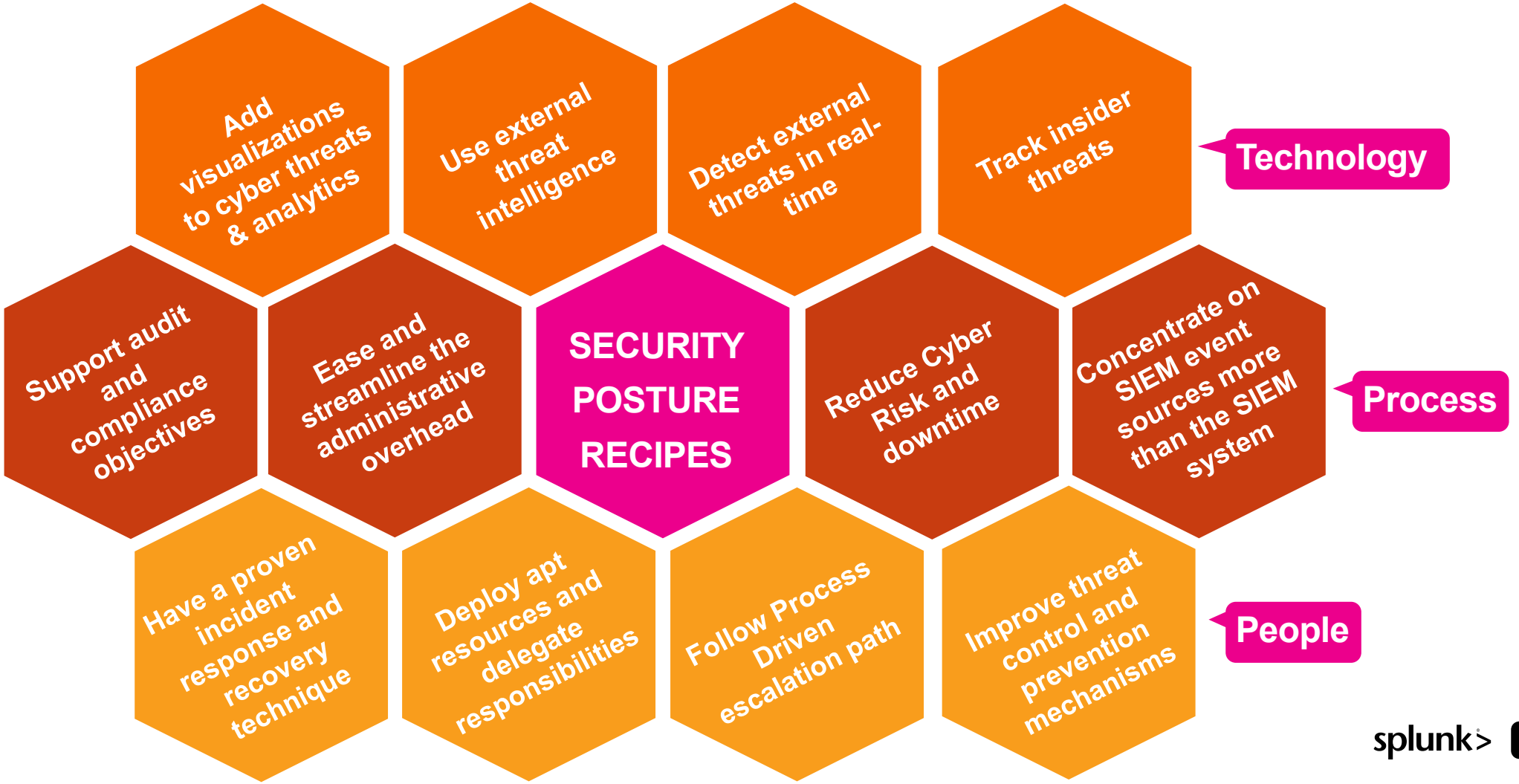

Benefits of Using the Recipe

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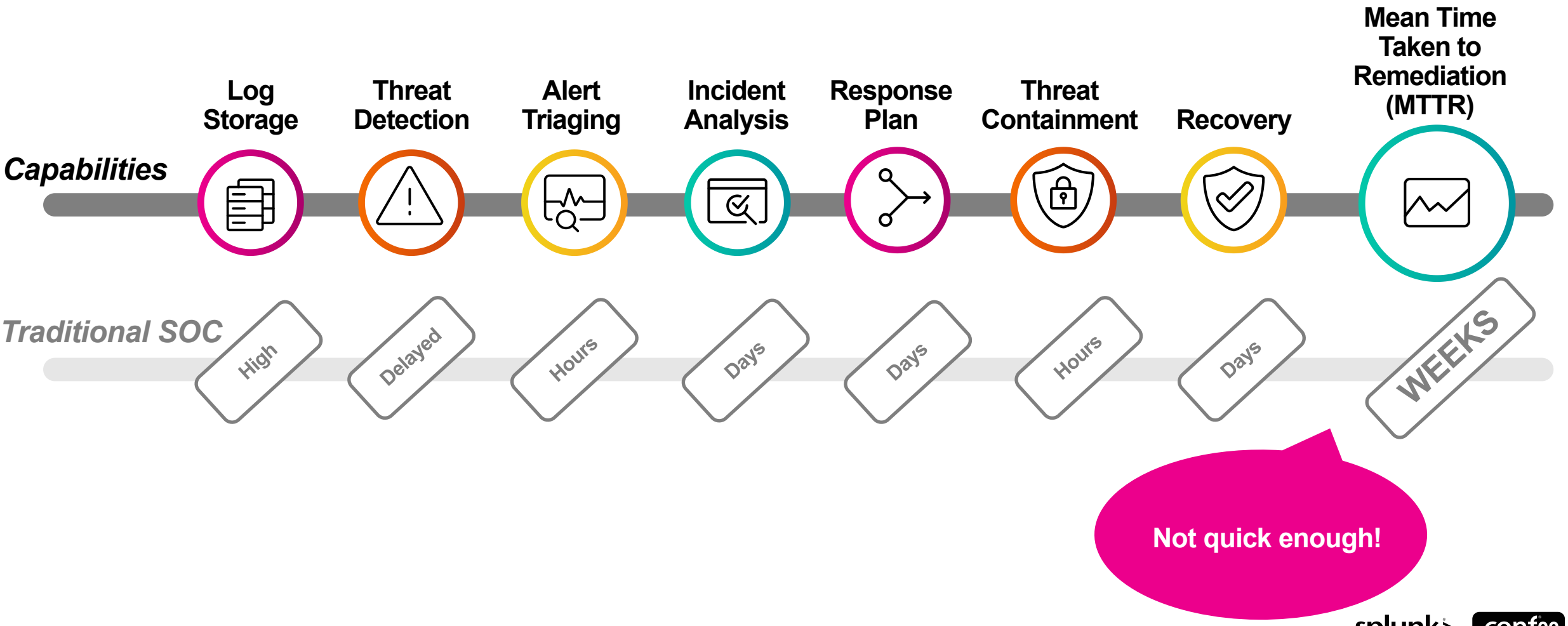

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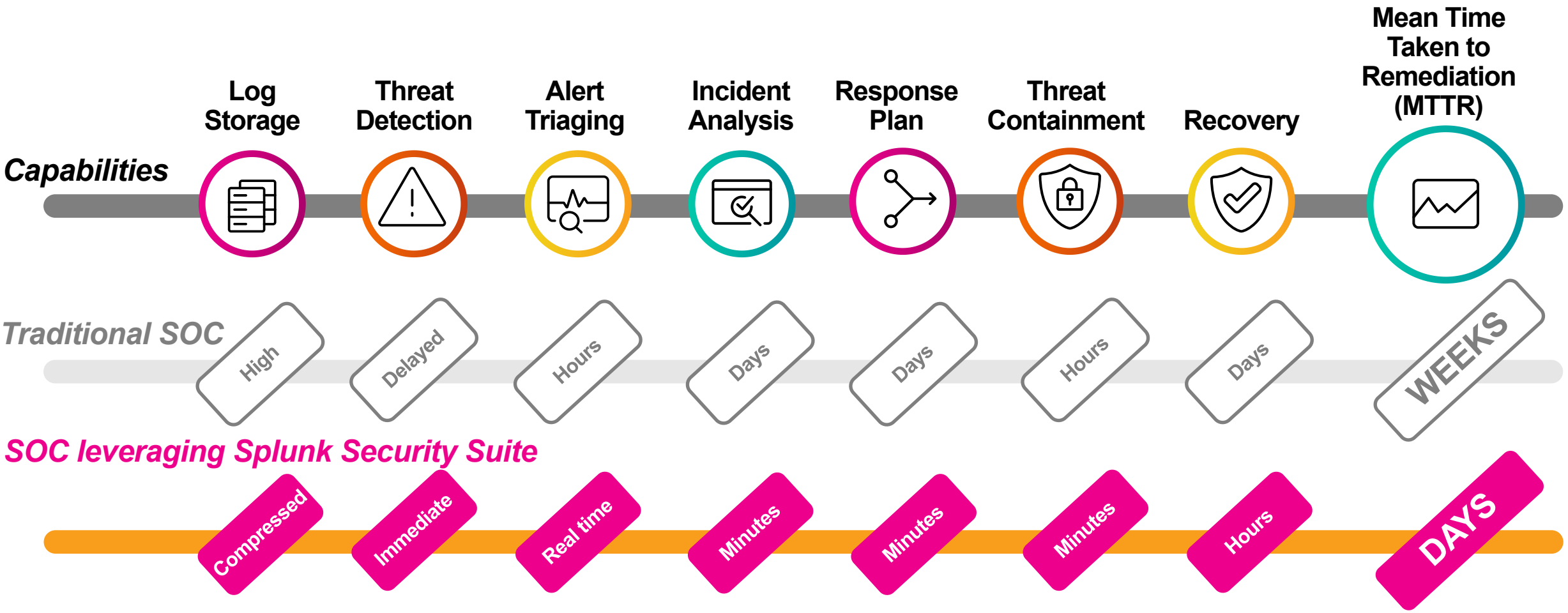

Food for Thought

We have detected, to some level also responded to threats. What next?

UEBA – Unknown Unknowns (Splunk UBA)

SOAR – Automate & Orchestrate (Splunk Phantom)

Threat Intel – Intelligence driven cyber security solutions (Verizon Threat Research & Advisory Center)

Global SOC – Cater to better Response & Recover

Forensics – Cyber security evidence & procedure

Strengths that complement our solutions – Verizon SIEM Services, DBIR, VTRAC, Forensics labs, SOC & CSIRT

References

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