SECS2797 Building threat-driven use cases for the real-world with iDefense intelligence

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Agenda

Use Case Overview

Sample Walkthrough

- Threat Actor Review
- Threat Actor Analysis
- Detailed Use Case Definition
- Use Case Prioritization

Use Case Overview

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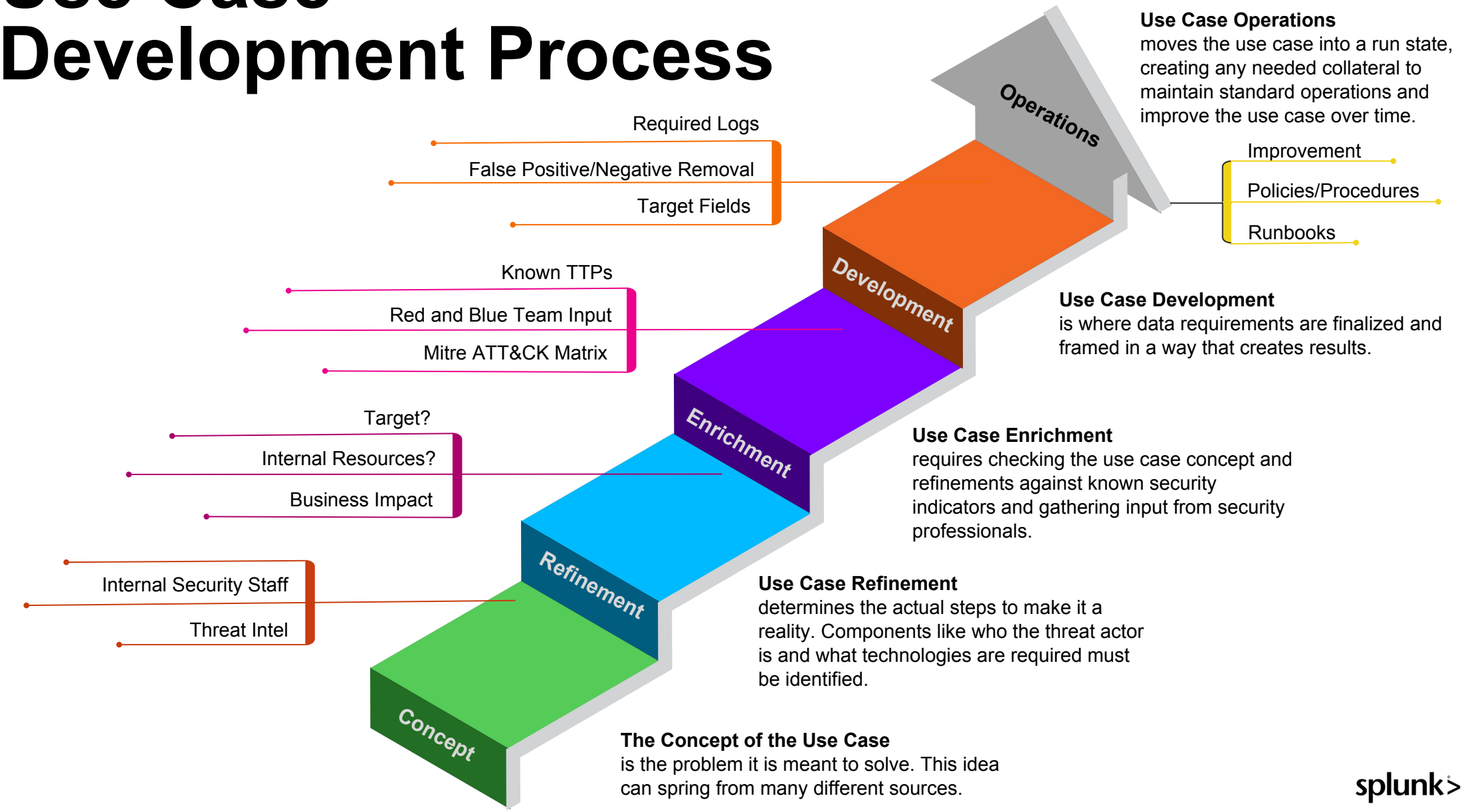
Use Case Development Process



Use Case Operations
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Use Case Development
is where data requirements are finalized and framed in a way that creates results.

Use Case Enrichment
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Use Case Refinement
determines the actual steps to make it a reality. Components like who the threat actor is and what technologies are required must be identified.

The Concept of the Use Case
is the problem it is meant to solve. This idea can spring from many different sources.

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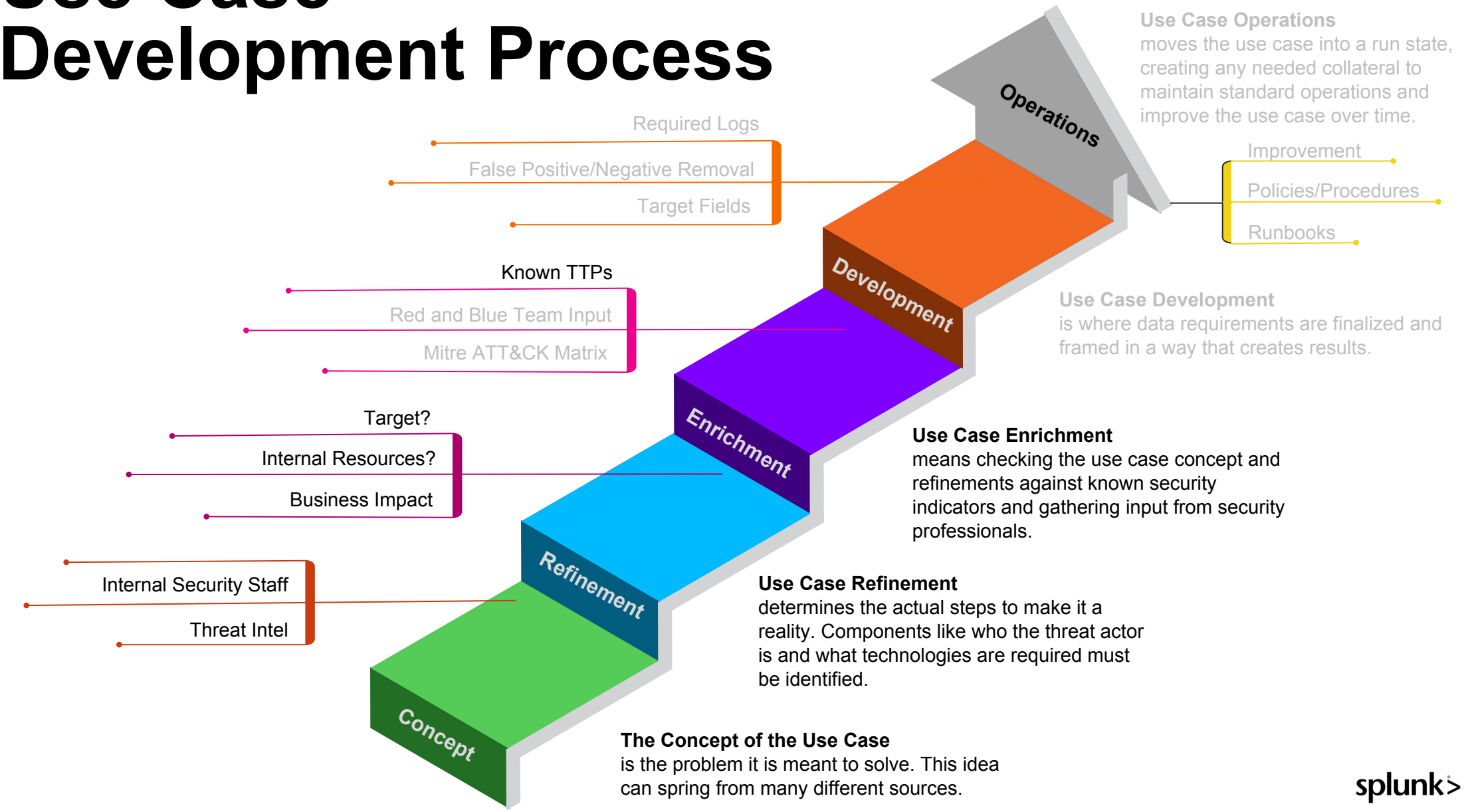

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Improvement
Policies/Procedures
Runbooks

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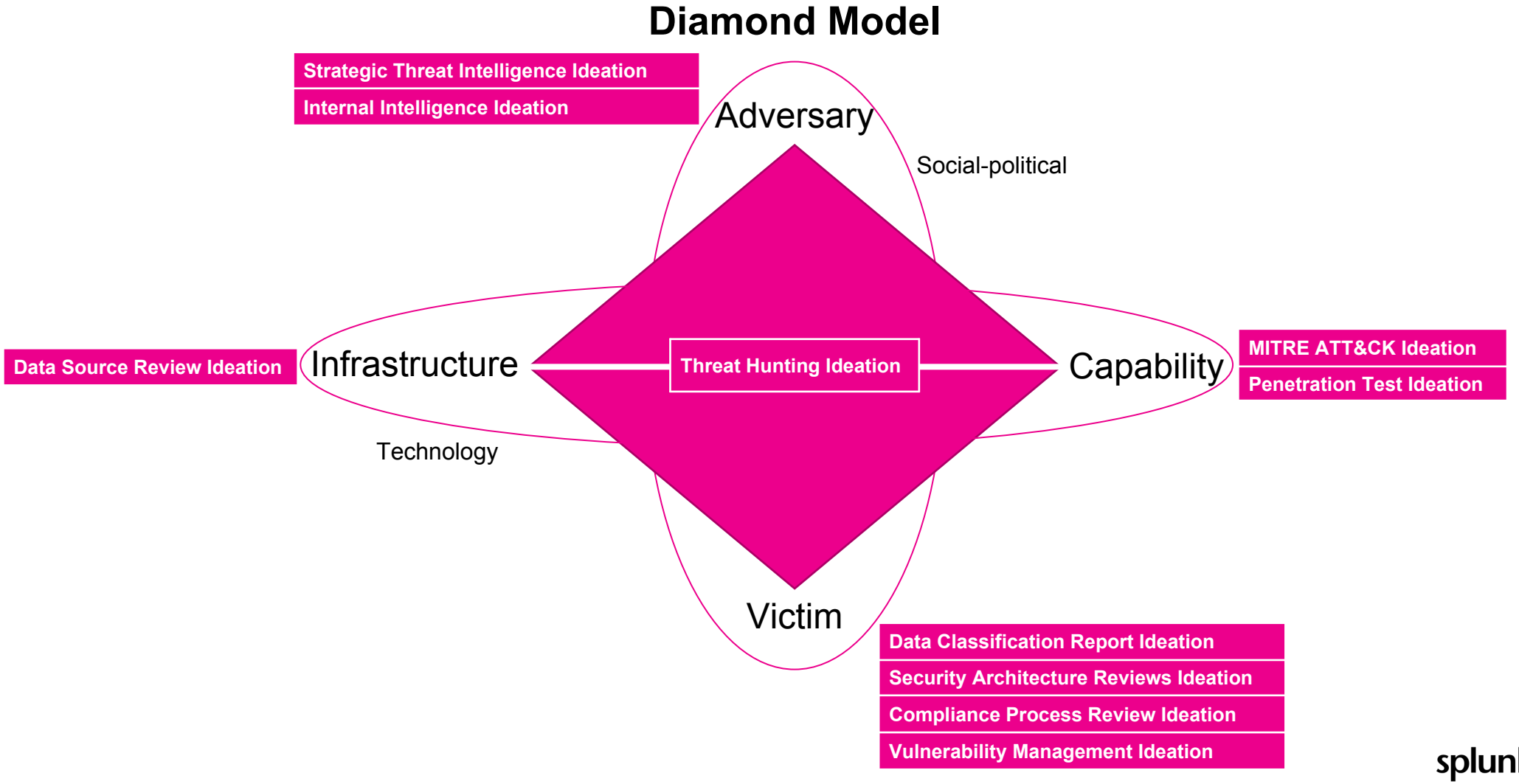

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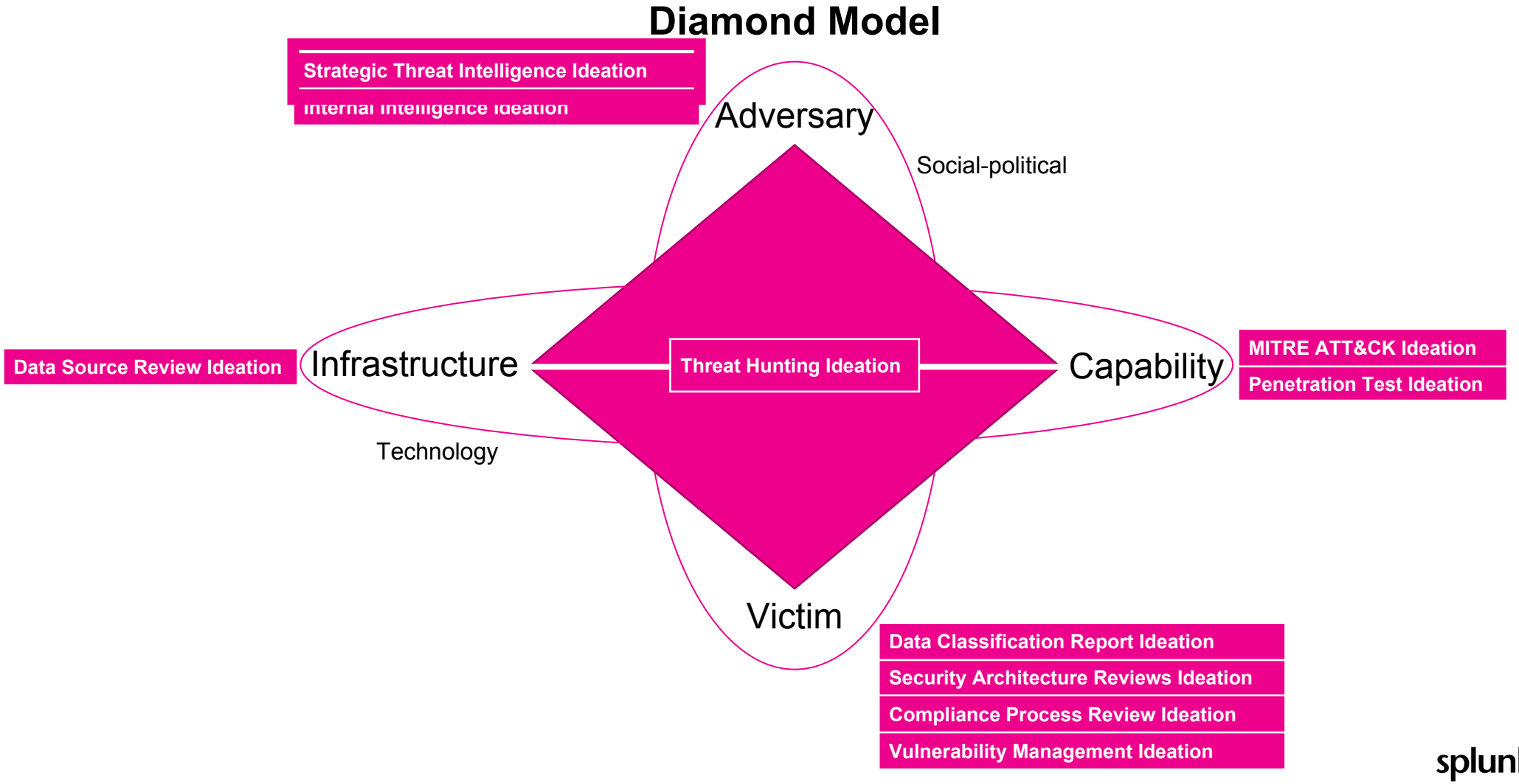

Example Walkthrough

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Process Overview

Develop industry-threat focused use cases

- Identify the threat actors relevant to industry
- Review threat actor-specific tactics, techniques, and procedures
- Identify use cases relevant to the business
- Map use cases to both existing and new data sources
- Prioritize implementation based on the specific threats

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HOGFISH Threat Actor

Sample threat actor analysis

The HOGFISH threat group has been operational since 2009. HOGFISH actors have conducted supply-chain focused attacks, where the initial action on objective is to compromise an MSP in order to subsequently gain access via legitimate, compromised user credentials to their client's networks for exfiltration of sensitive information.

Initial Compromise	Execution	Persistence	Defense Evasion	Credential Access	Discovery	Lateral Movement
• Spear Phishing Campaign • Malware attached to email	• Powersploit to inject code into PowerShell	• Autorun registry keys for malware persistence	• Utilized base-64 encoded content	• Mimikatz • pwdump	• Used net use to check for connectivity to machines • Scripts to enumerate IP ranges	• RDP

RECOMMENDED USE CASES

1. Monitor for malicious start-up tasks
2. Monitor for external emails from unknown domains with attachments
3. Monitor for common hacker tools

Use Case Sample

Sample use case for HOGFISH Persistence

Use Case Name:	Malicious Start-up Tasks
Threat Scenario	Threat establishes scheduled tasks, startup items or cronjobs to maintain persistence
Objective	Prevent competitors and malicious entities from creating malicious start-up tasks to establish malware persistence
Stakeholders	SOC
Tools	Splunk, Cylance, Carbon Black
Data Requirements	Windows, CrowdStrike, Cylance, Carbon Black, CyberArk
Logic	Alert on: • Unknown startup items • Unknown cron jobs • schtasks usage • Run registry key changes

Prioritize Use Cases

- How severe is the threat? What is the impact to the business?
- Is the required data already available? How difficult will it be to get the required data?
- Are there existing compensating controls to prevent this activity?
- Do you have existing detection content for similar TTPs?
- Are there clear actions to investigate and respond to the use case?

Recap

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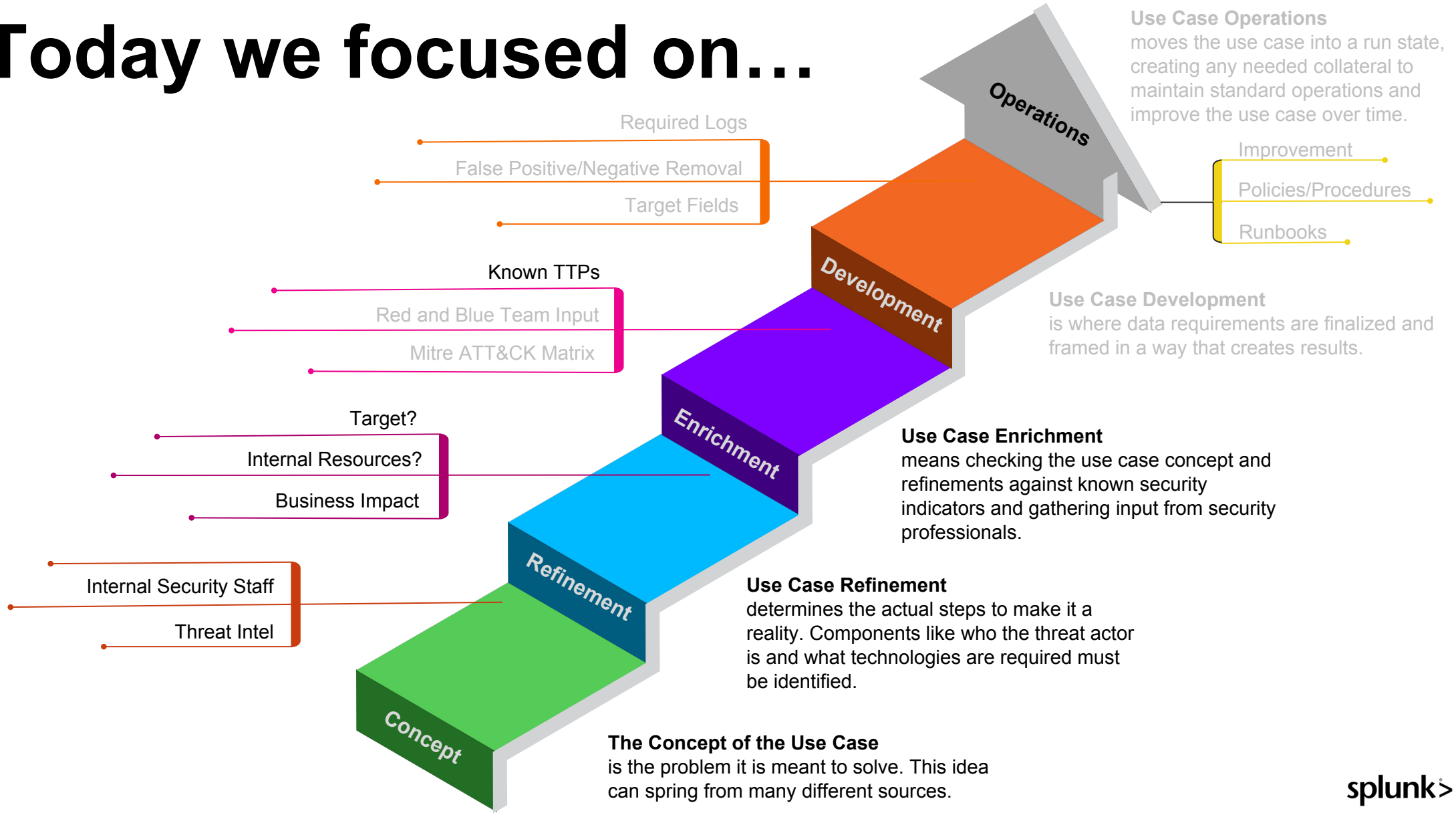
Today we focused on…



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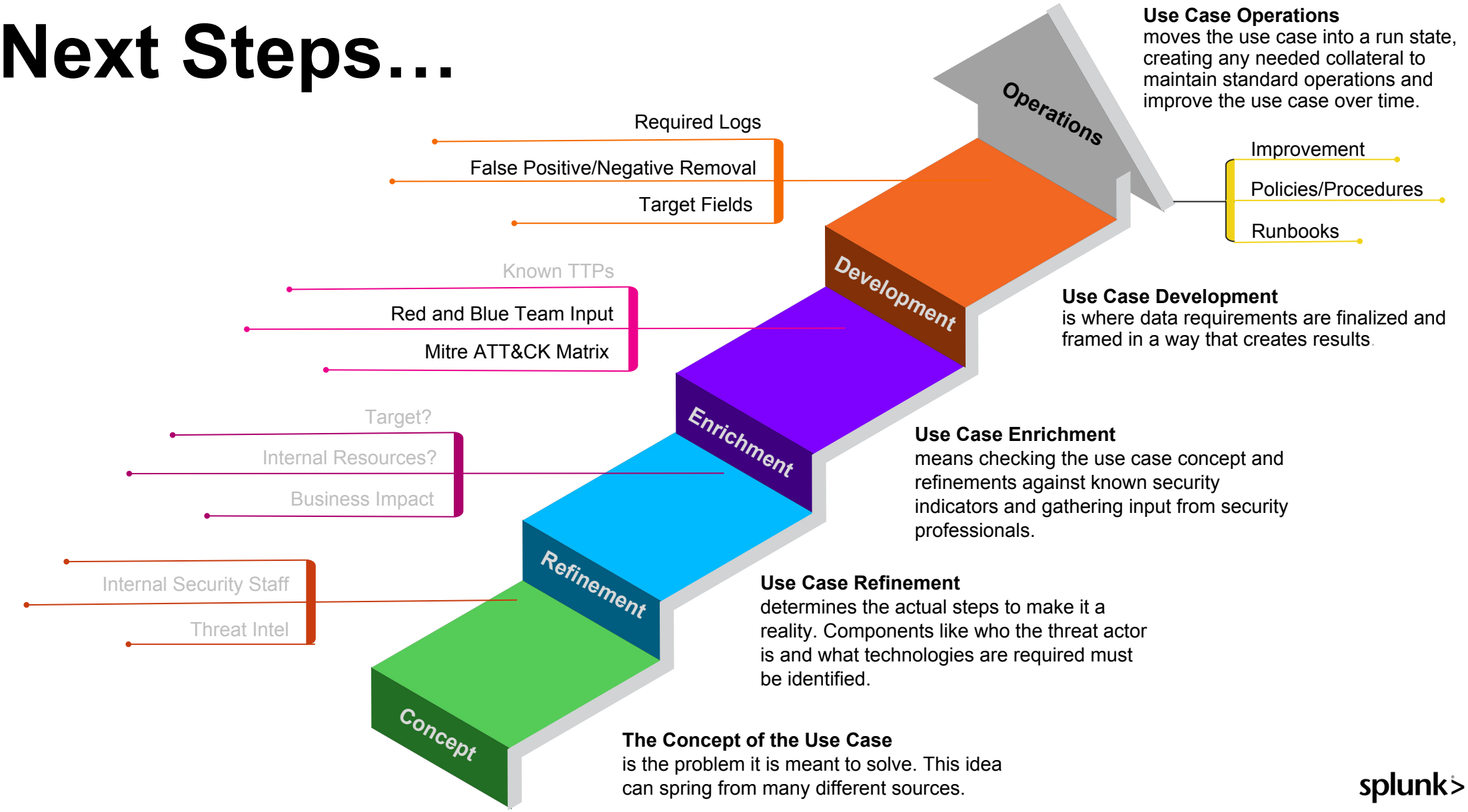
Next Steps…



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Key Takeaways

1. There are multiple sources of use case ideation to proactively detect threats
   - ACTION: review your current ideation processes for additional use case sources

2. Threat intelligence serves as a valuable source of detection content beyond simple indicator matching
   - ACTION: review your latest threat intel briefs to identify attacker TTPs for potential use cases

3. Security use cases require response to be effective
   - ACTION: validate your current detection rules are aligned to response processes

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