



Saving the Nations Food Supply with Data-Driven Analytics

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Engineering Practice Lead | Copper River ES



Introduction

Me, By The Numbers

20

Years in IT
Automation,
Engineering,
& Security

10

Years working
with Splunk

3

Years as
Co-Lead DC
Splunk'ers

5

Years
supporting
Public Sector

9

Number of
Agencies my
team currently
supports

Forward-Looking Statements



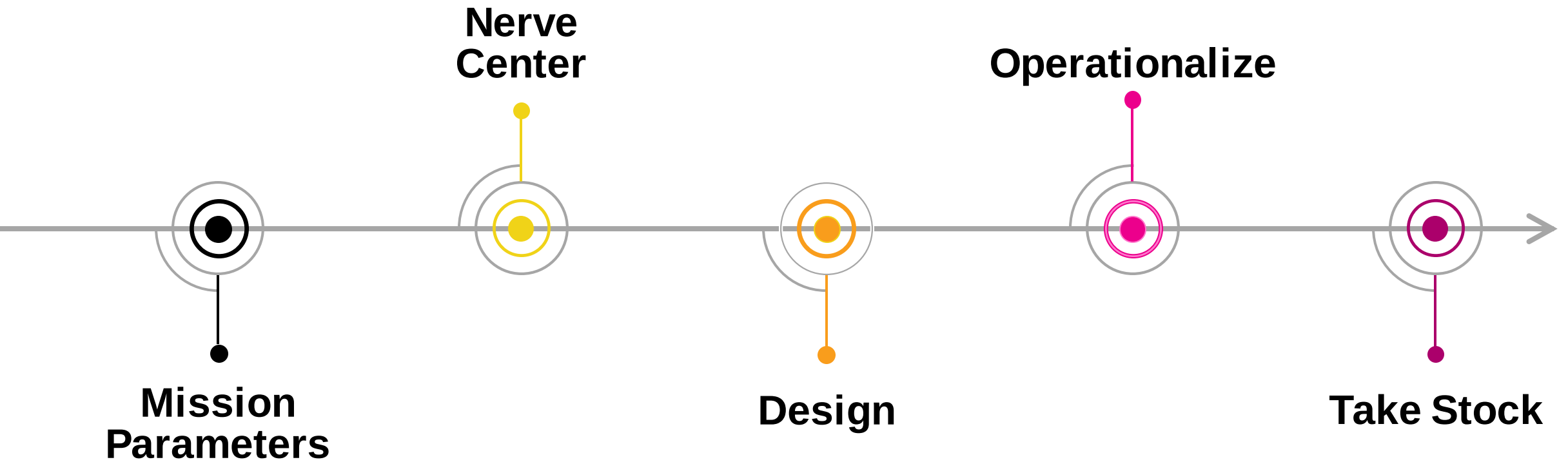
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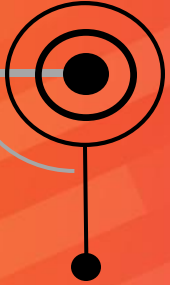
During the course of this presentation, we may make forward-looking statements regarding future events or plans of the company. We caution you that such statements reflect our current expectations and estimates based on factors currently known to us and that actual events or results may differ materially. 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.

In addition, any information about our roadmap outlines our general product direction and is subject to change at any time without notice. It is for informational purposes only, and shall not be incorporated into any contract or other commitment. Splunk undertakes no obligation either to develop the features or functionalities described or to include any such feature or functionality in a future release.

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Strategy





Mission Parameters

Understand the Mission

Information and Asset
Protection



Federal Regulations &
Mandates



Mission / Business
Services



Identify The Challenges

Mission Related Outages

- Communications
- Knowledge



Enterprise “Confusion”

- People
- Process
- Technology



Real World Impacts

Rotten Produce

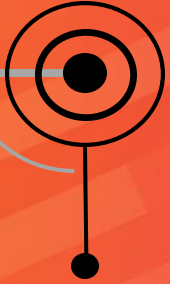


Consumer Market



Corporate Espionage

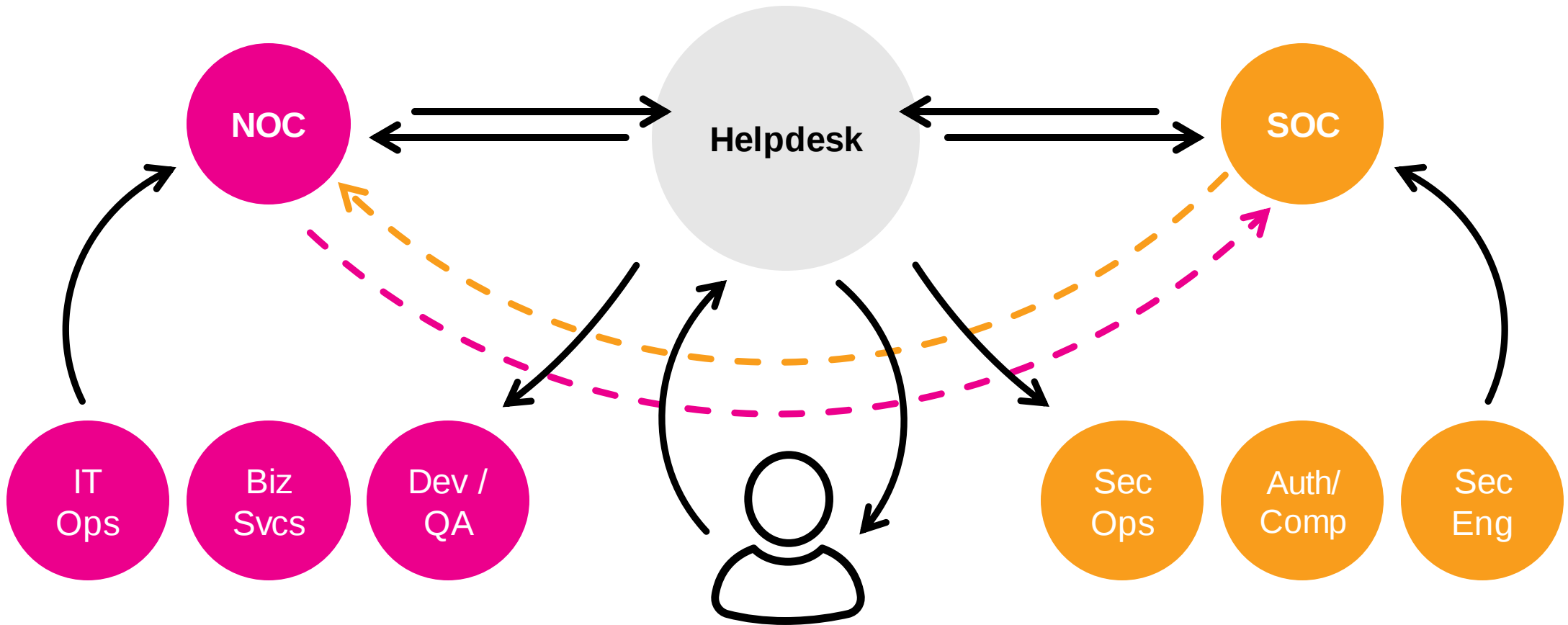
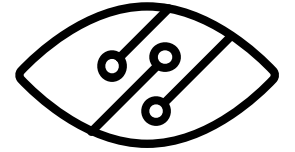




The Nerve Center



Introspect



Nerve Center Composition

Organizational Structure

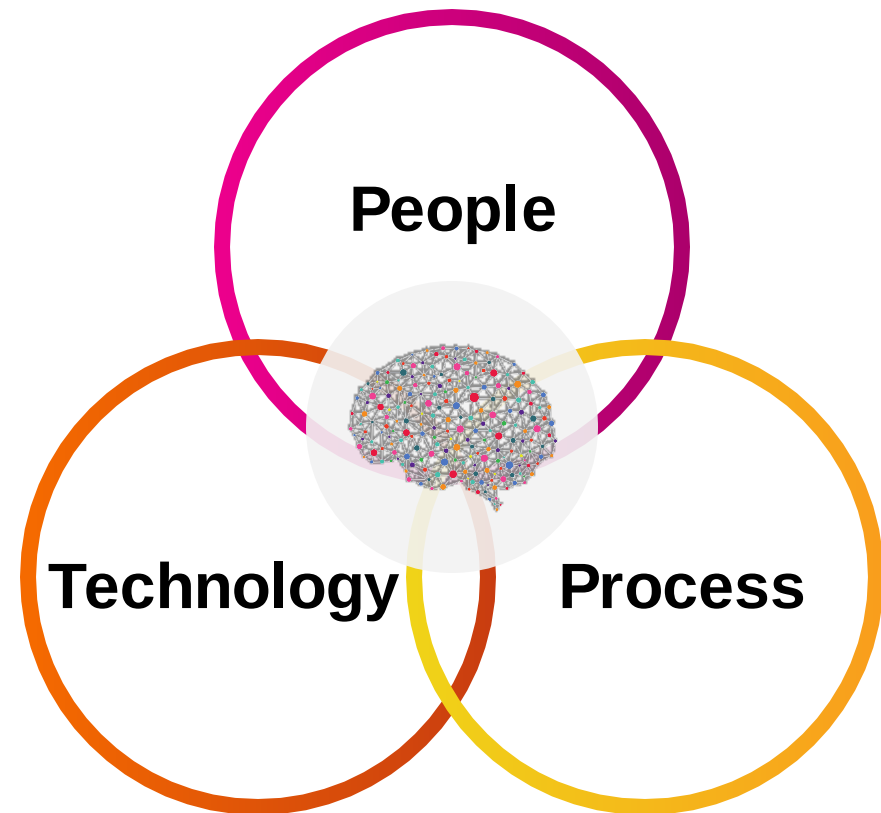
- Combine NOC/SOC

Technology / Application Rationalization

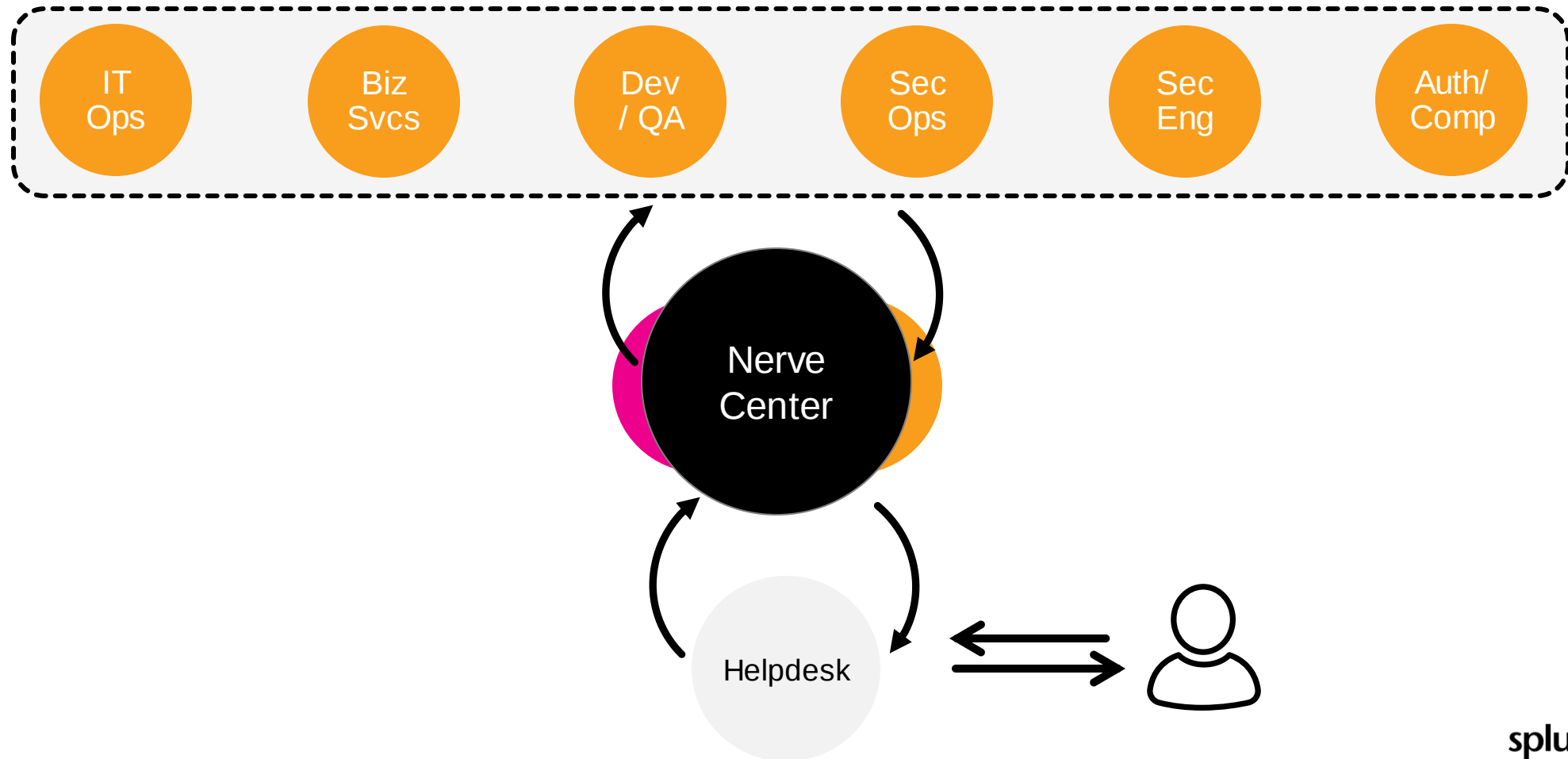
- Normalize behind Splunk

Processes and Workflows

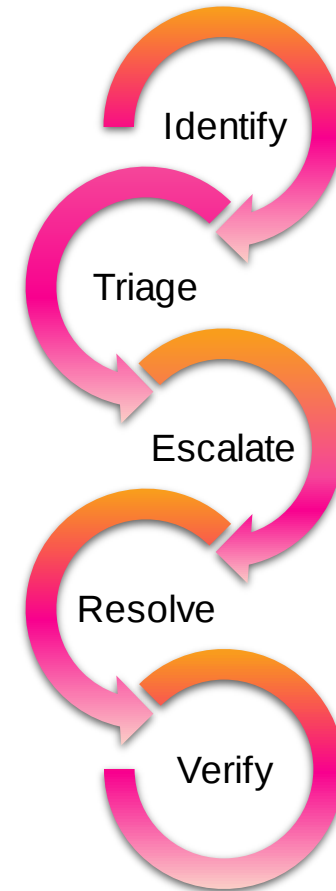
- Orchestration/Automation



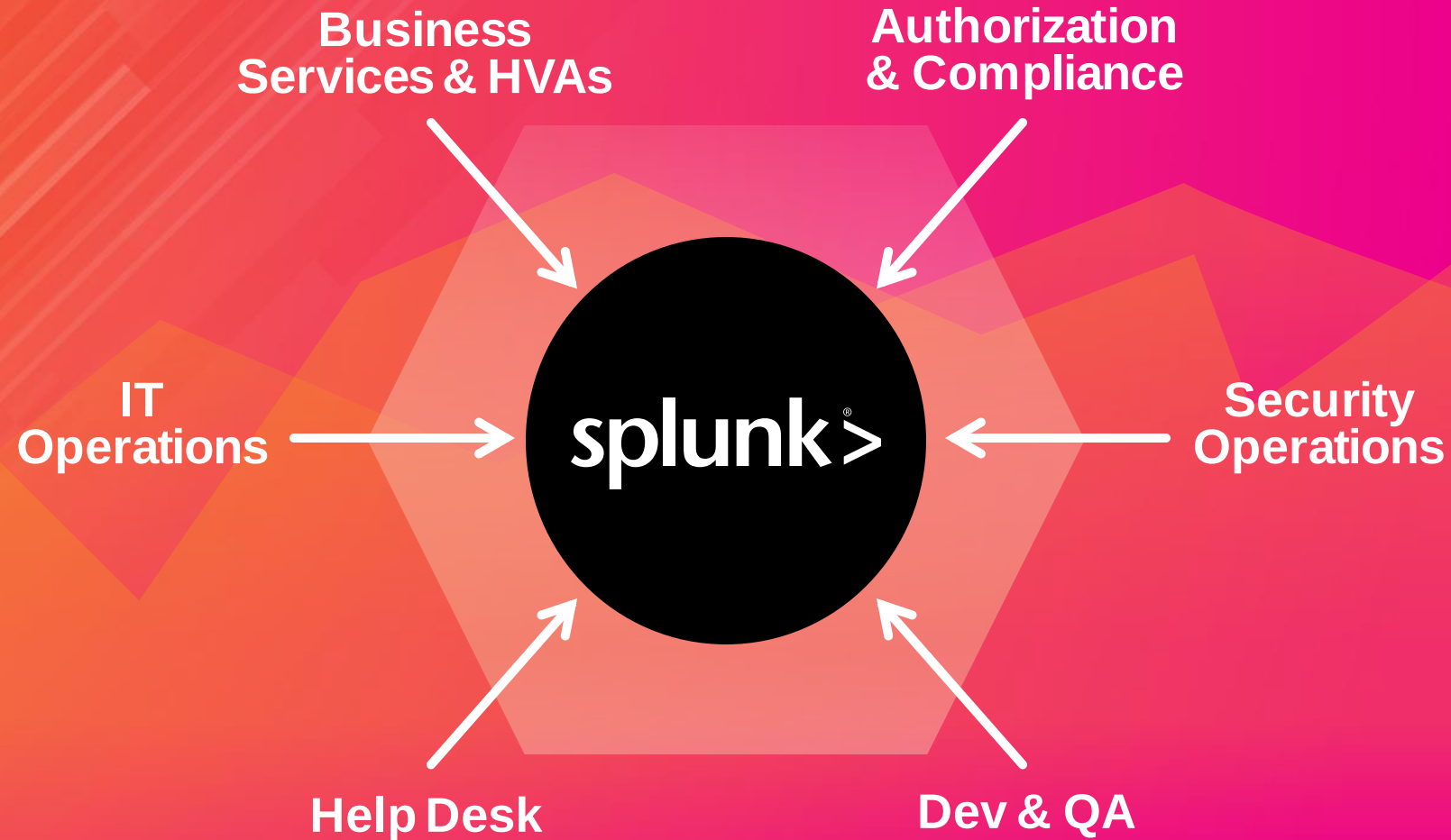
Organizational Alignment



Process Alignment



Technology Alignment



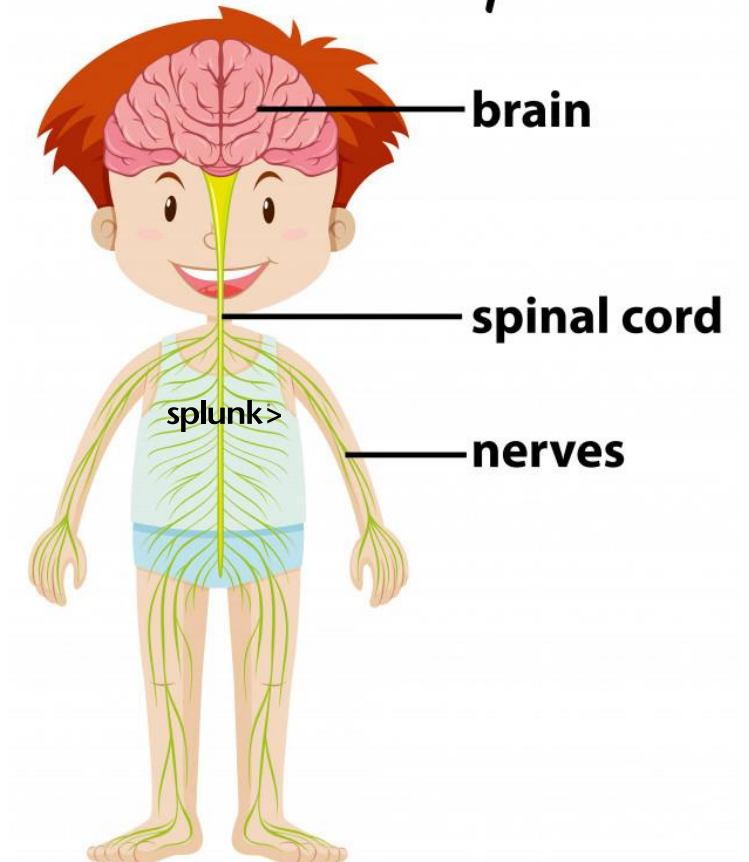
Splunk Anatomy 101

Brain = Reports, Alerts, Logic and Automation

Spinal Cord = Forwarders and Data Collection

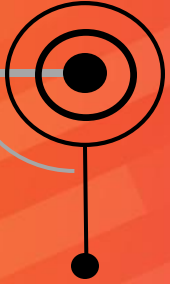
Nerves = Data Sources

Nervous System



“Take all our data, add a heavy splash of automation, and bring forth a strong stomach for change.”

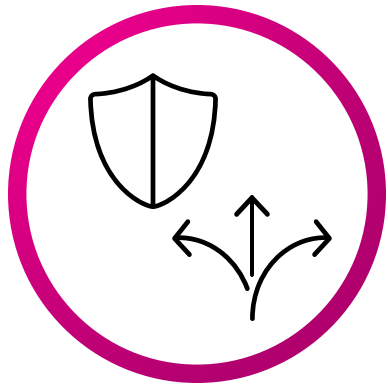
All data is relevant – Automation is Critical – Change is hard



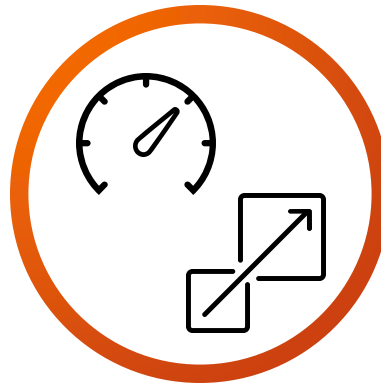
Design

Design Questions

Desired outcomes will dictate the questions you answer



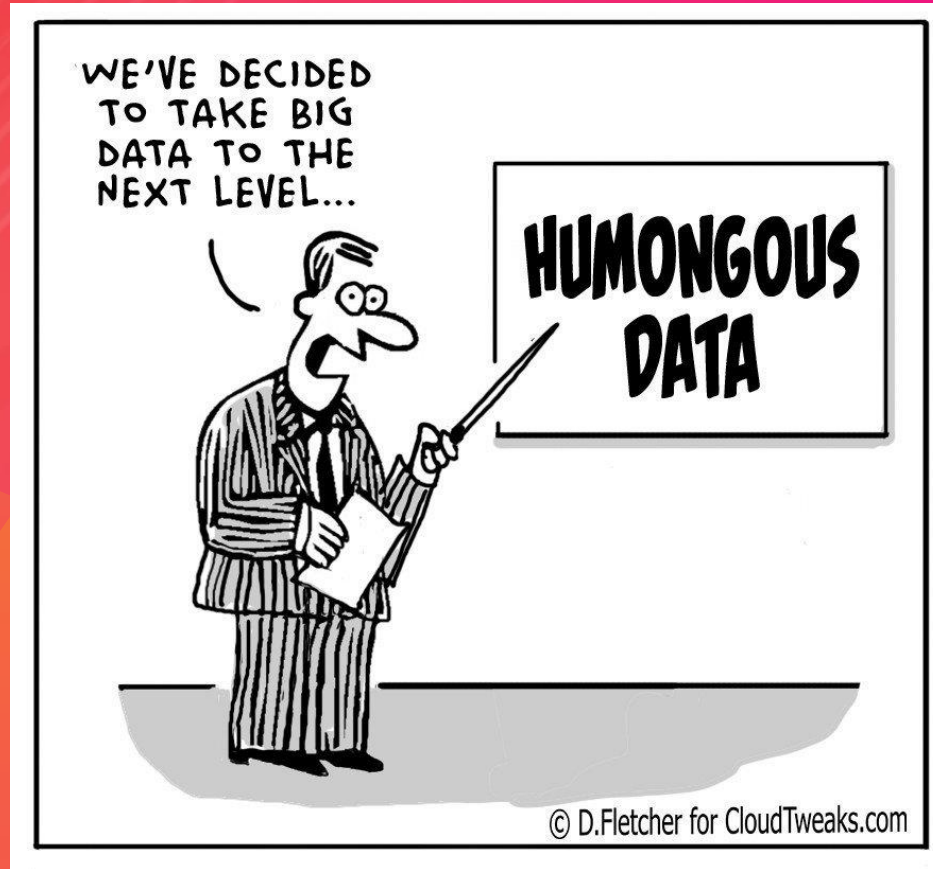
How do I keep my information **secure**, but make it **highly available**?



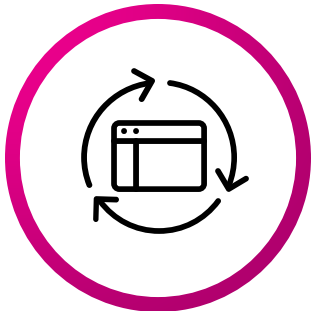
How do we get the **performance** we need, but make it **scalable** to all business verticals?



How do we **share** data between agencies, but maintain **control** of what is **shared**?



Splunk Design Requirements



Near
Real-Time
Correlation &
Reporting



10+ TB Daily
Ingestion with
Multi-Site Index
Clustering



~ 100 Concurrent
Searches + ES &
API Extensible

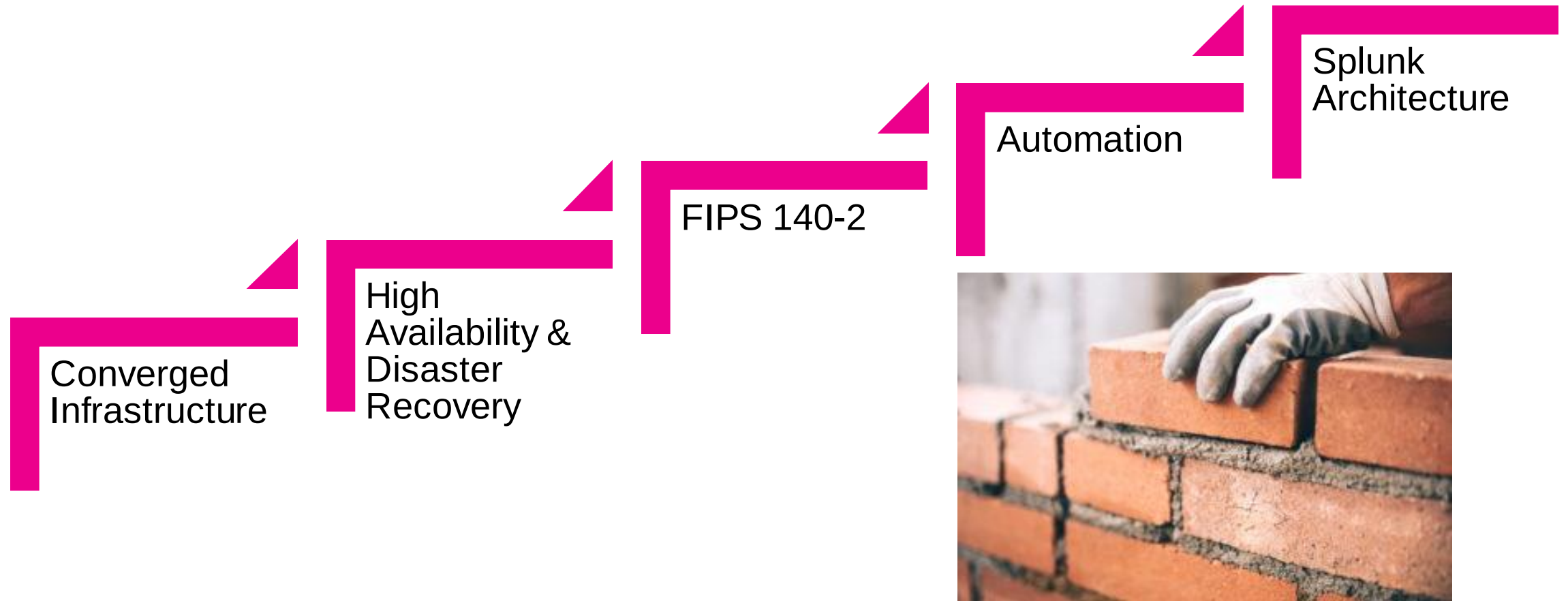


FIPS 140-2, PIV
Integrated with
RBAC

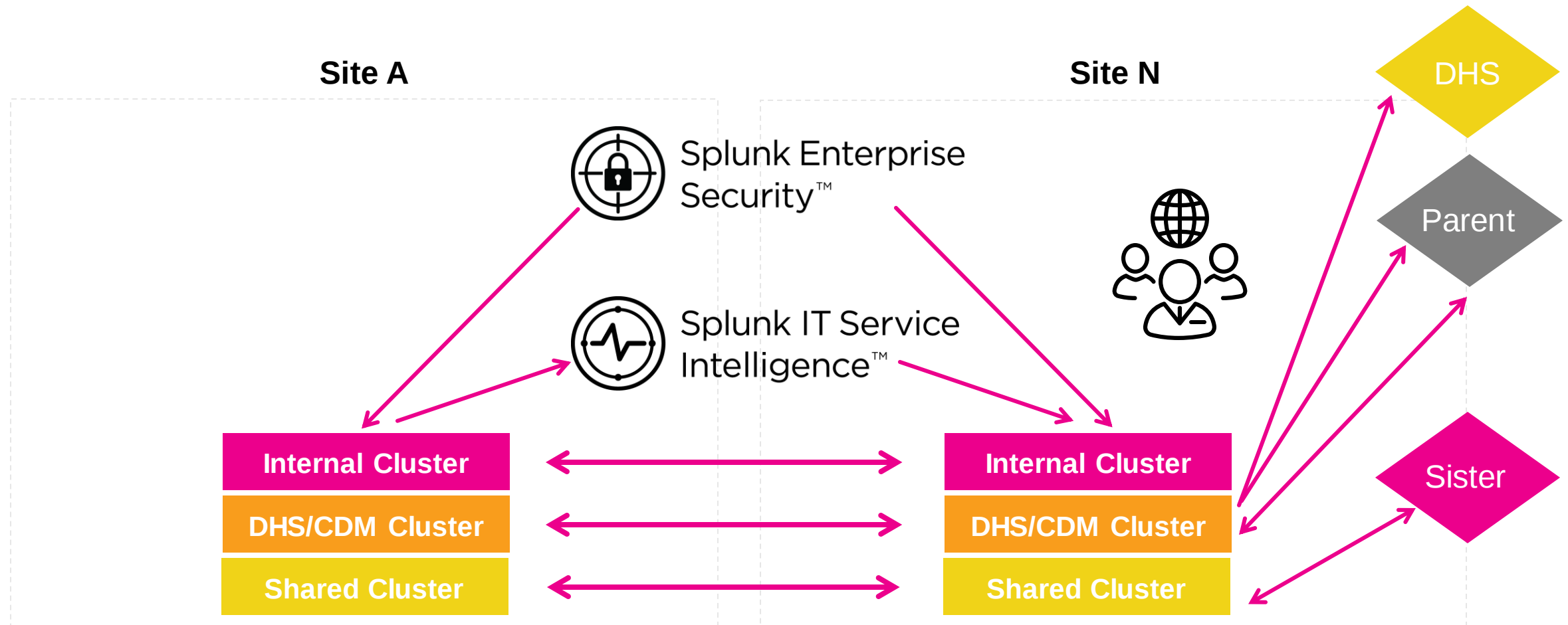


3 Years
Searchable
Retention, Hot &
Warm Only

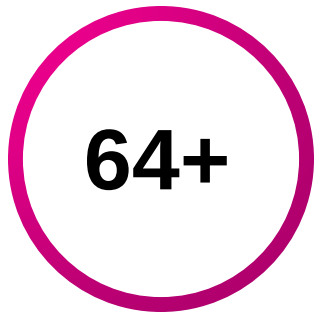
Build On A Solid Foundation



Multi-Agency Integrated Architecture



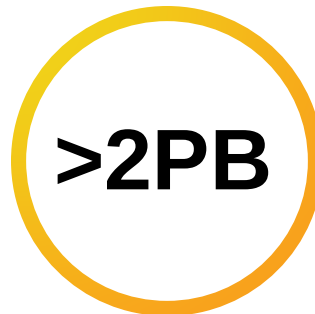
Environmental Statistics



Data Sources



Endpoints



SSD & NVME



Threat Feeds

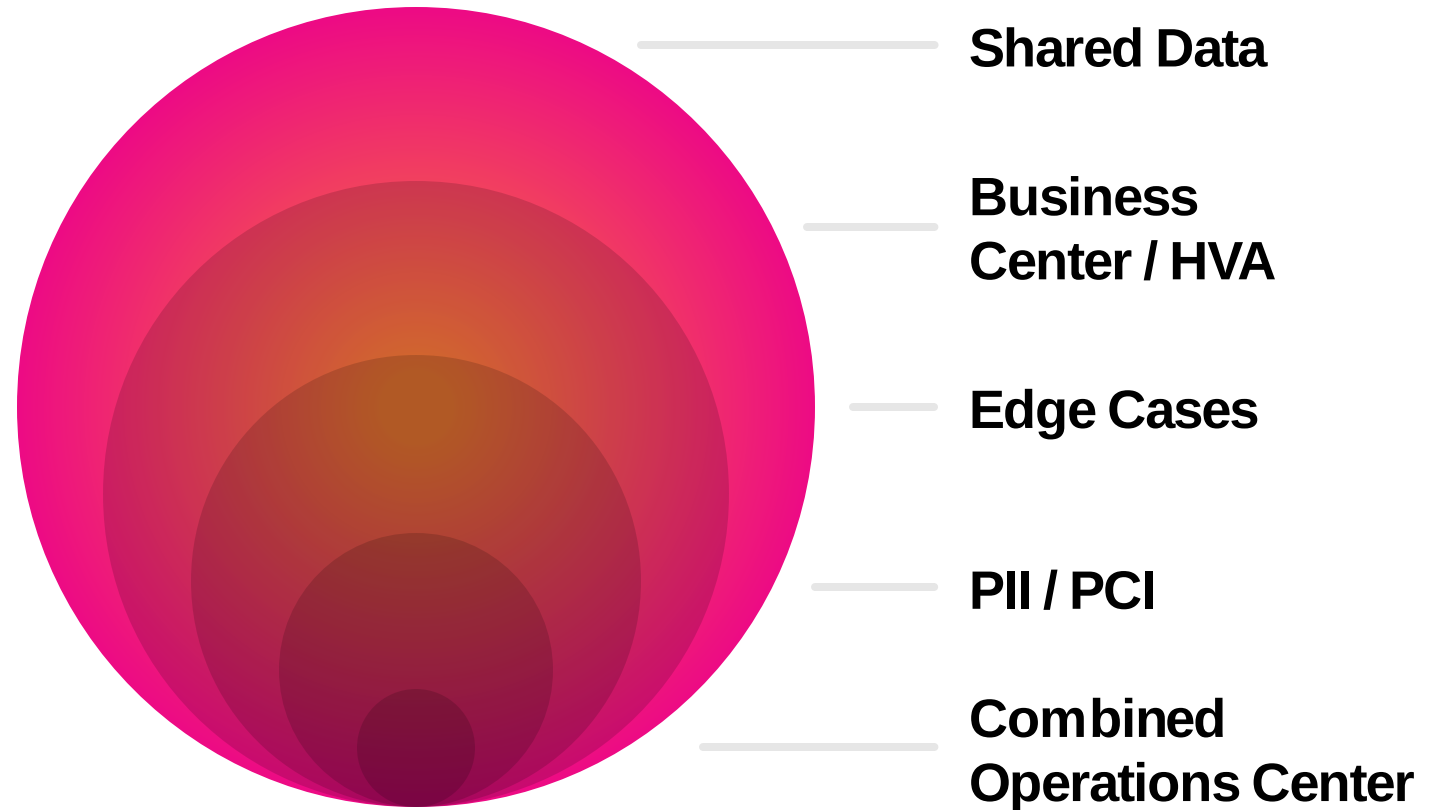


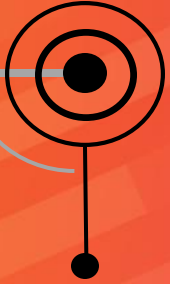
Results / sec /
indexer

Organize Your Data



- Align Use Case Registry & Data Sources
- Data Classifications & Restrictions
- One Data Source Per Index
- Map Index Enclave To Data Source
- Raw VS Summary





Operationalize

Where to Start?

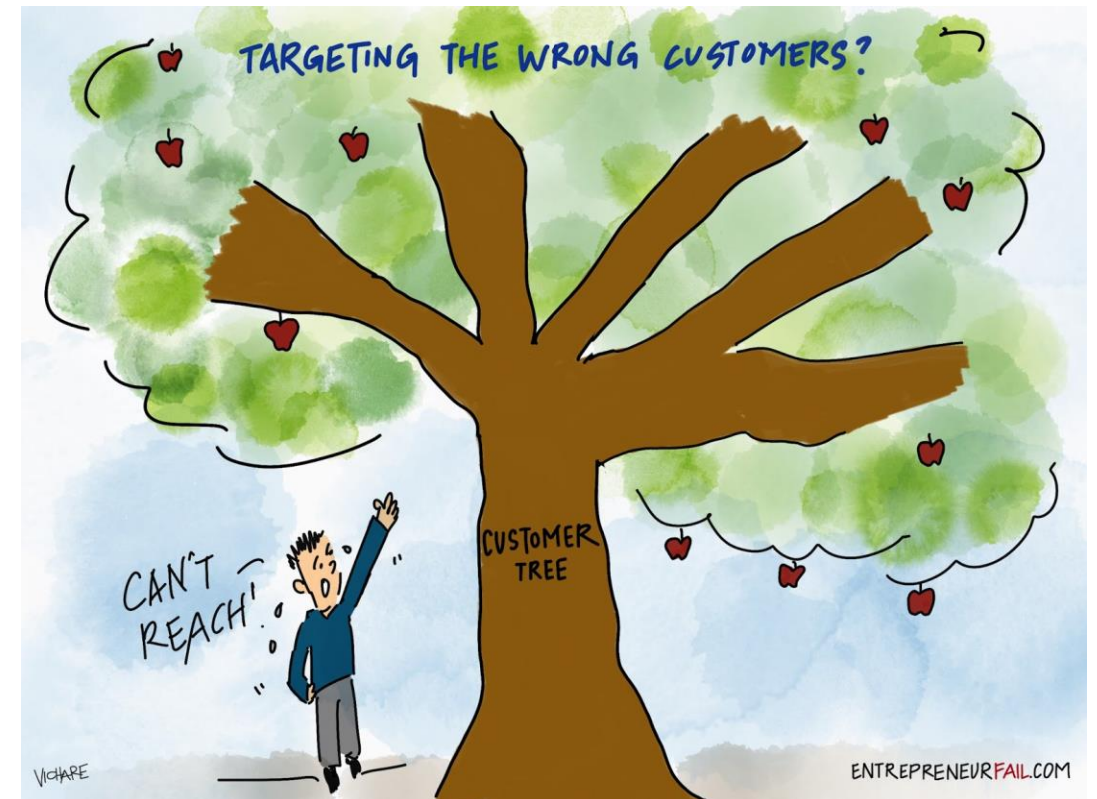
Low Hanging Fruit

Frequency over Difficulty

Pace Yourself

Teach Others

Triage Workload



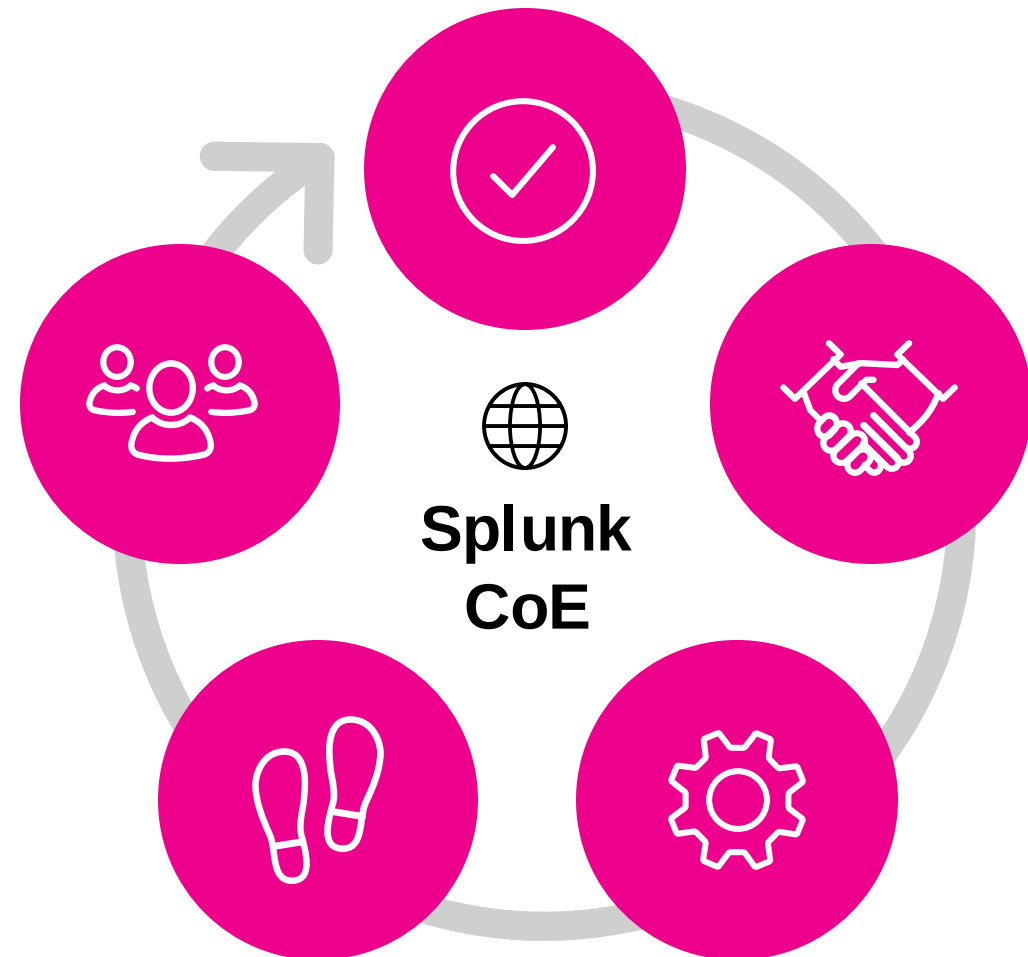
Use Case Registry

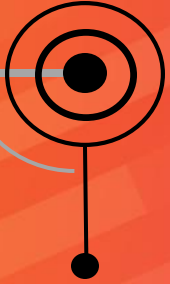
Group by Consumer or Function

- Mission Centric
- Security Operations
- Information Assurance
- Executives
- IT Operations
- Helpdesk

Center of Excellence

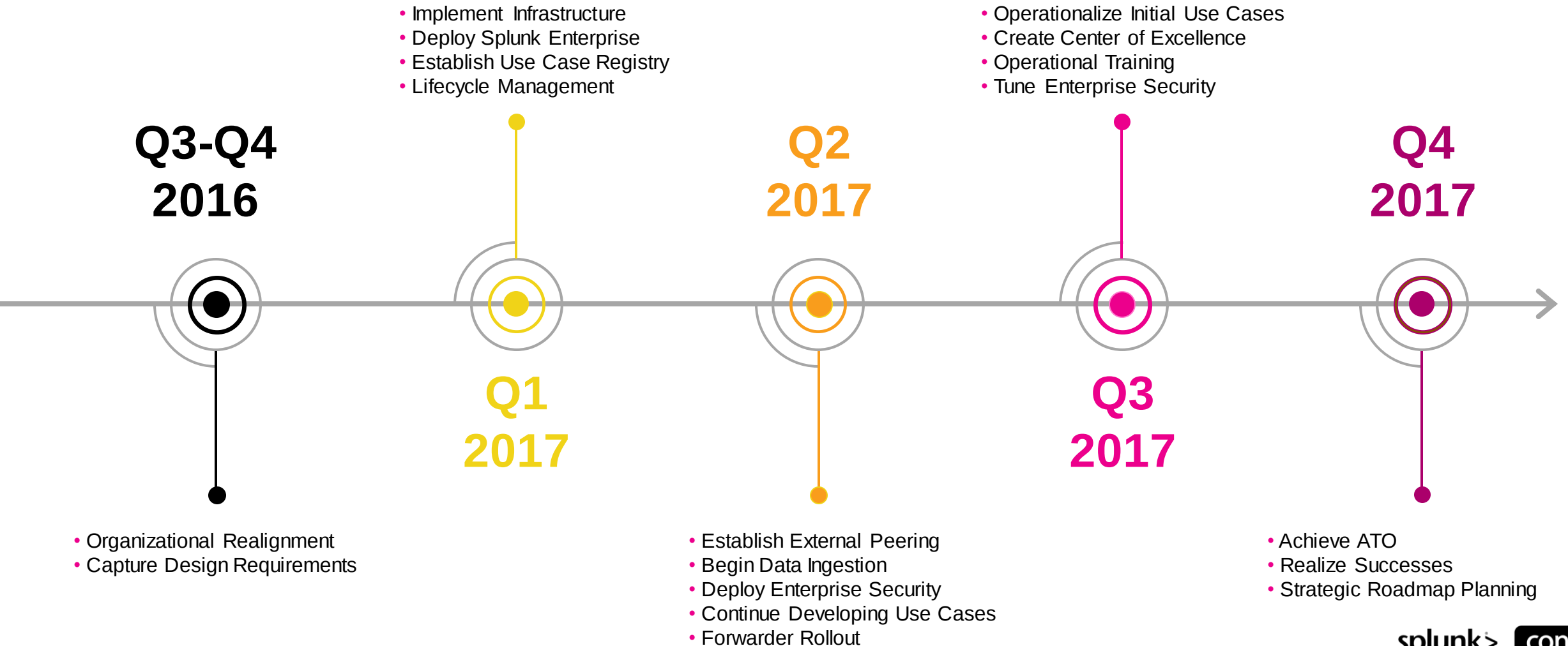
- Business Value
- Governance
- Operational Excellence
- Enablement
- Collaboration



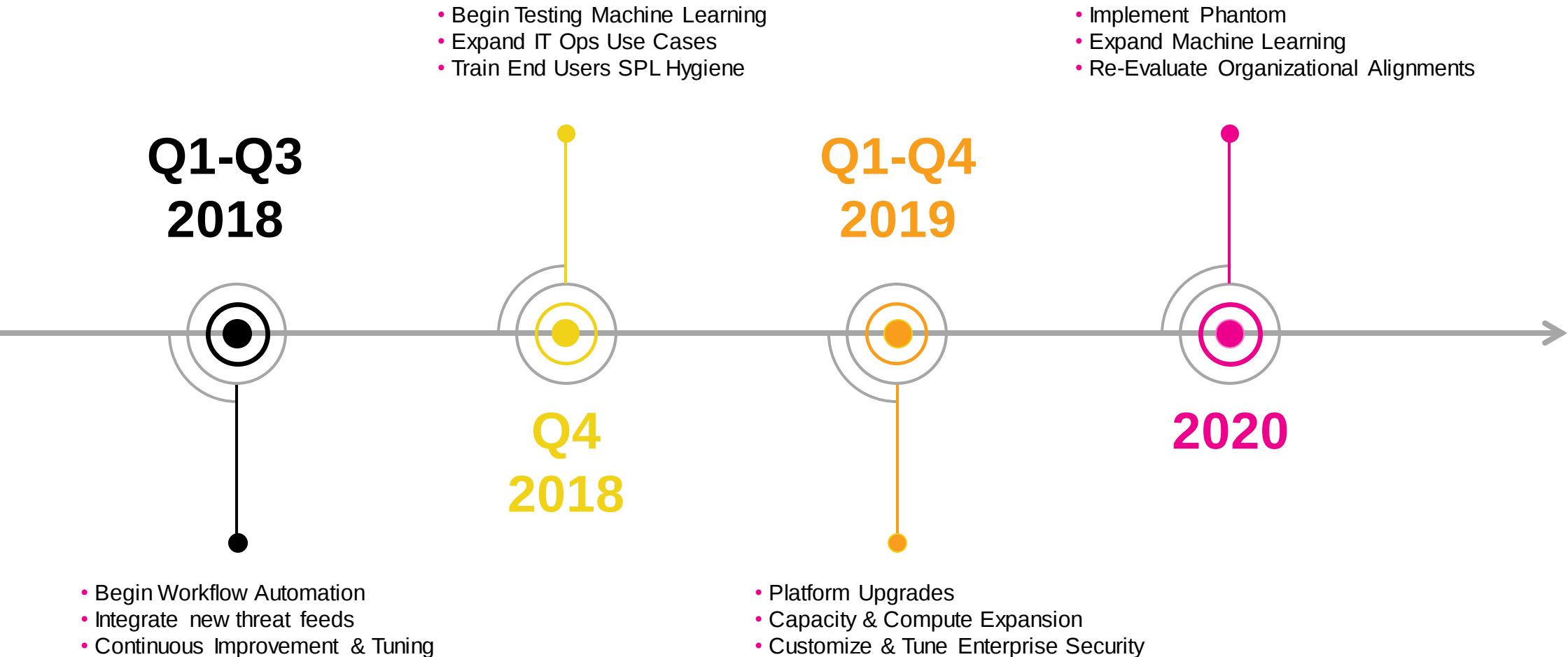


Take Stock

Timeline Review



Timeline Review



Operational Results



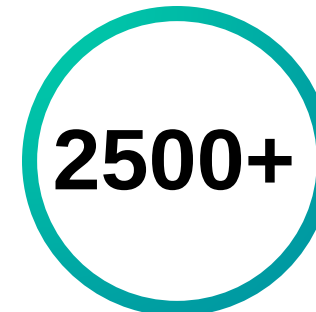
Reduction in
MTTD



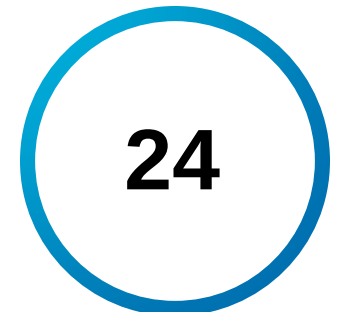
Reduction in
MTTR



Reduction in
overall outage
times



Reduced
“Man-Hours”



Custom
Splunk Apps



Q&A

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