

Explode your Splunk ITSI Footprint

Automate your Service Decomps!

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Agenda

1) Introduction to Cox Automotive

About us, and what are we trying to solve?

2) Designing Model Service Trees

How did we start building the automation framework?

3) Expanding your ITSI Automation Workflow

Thinking about your customers!

4) SNOW-ify!

Tying your workflow to a SNOW form.

5) What have we learned?

Takeaways from our experience with Decomposition Automation.



Introduction to Cox Automotive

Our Splunk footprint

2.6 B

Daily Unique Event
Count

7 K

Total Users

30

Unique Business
Units

9 TB

Daily License Usage

A Quick History—Cox Automotive and Splunk

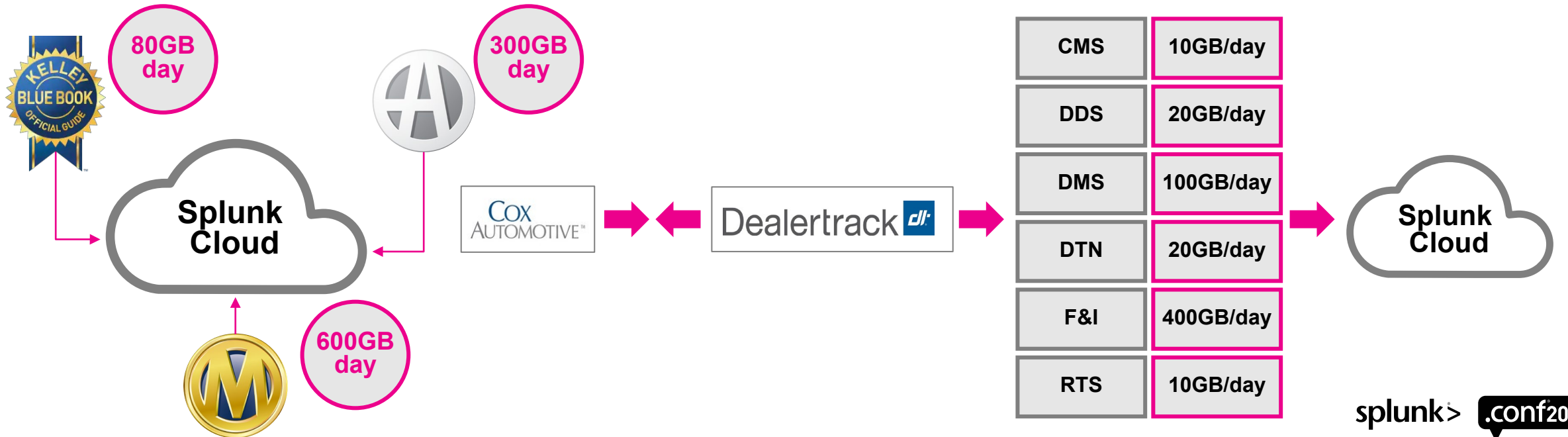
2014 Cox Auto Splunk Team was formed

2015 Integrate Big 3 Cox Auto Splunk On-Prem Deployments

2016 Dealertrack Conglomerate Acquisition

2018 Integrate DealerTrack Inherited Deployments

2019 All Cox Auto Data in Splunk Cloud



Implementing ITSI – Scaling Challenge



Resource Constraints

Cox Auto's Splunk Team has 4 engineers.

Small team handles Splunk ops, engineering, and enablement.

Team does not have data ownership and insights into customer's KPI's.

Service Decomps are time consuming and require repeated engagements.



Customer Requirements

There are hundreds of ITSI use cases in Cox Automotive.

Different developers are responsible for different pieces of the application.

Developers have a very rudimentary knowledge of Splunk.

Architectural diagrams are not readily available.



Attacking the Problem

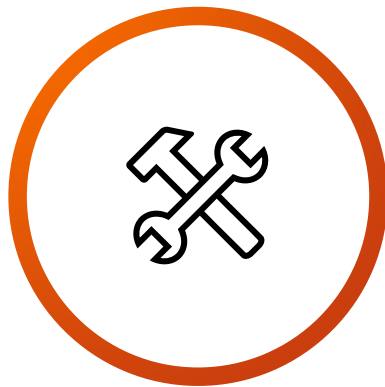
How can we scale?

Design Repeatable Models



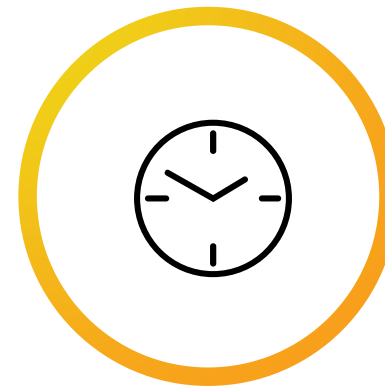
Re-usable Model
Service Tree,
Decomposition Tree,
Standardize Data
Collection
can we scale?

Create an ITSI Automation Flow



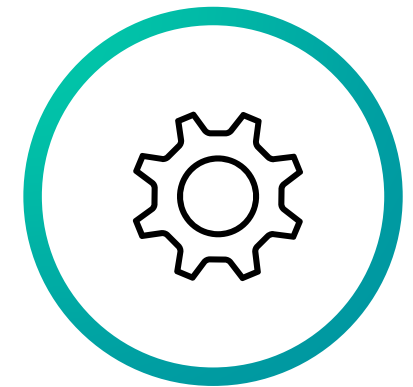
Easy for user
to follow along

SNOW-ify



Further automate the
process by
embedding the
automation flow into a
SNOW form

Continuous Improvement



Leverage SNOW's
capabilities to integrate ITSI
with Incident, Change, and
Problem Mgmt

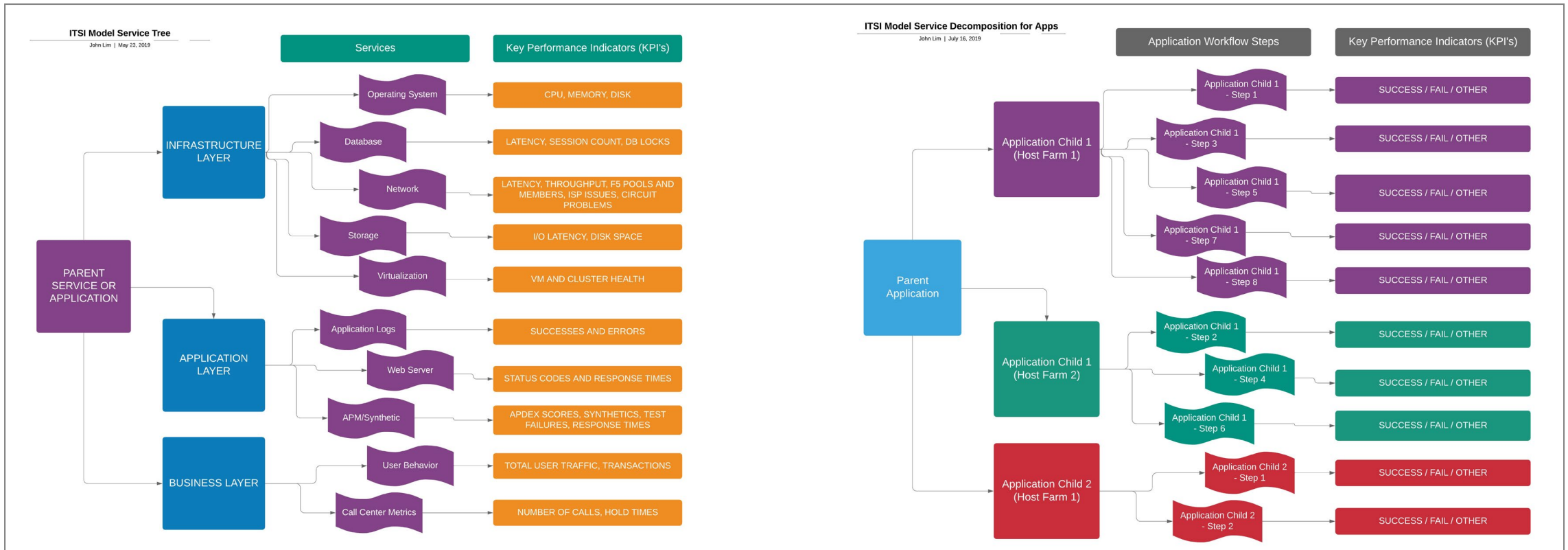


Designing Model Service Trees

How did we start building the automation framework?

ITSI Model Trees

Visualize the decomp for your users





Expanding your ITSI Automation Workflow

Service onboarding phases

The ITSI Onboarding Phases

A user driven interaction

Prerequisites



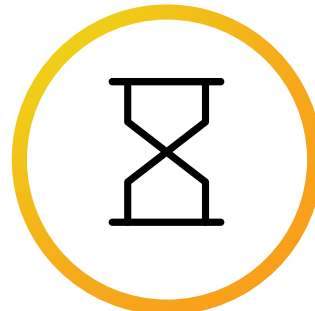
Opening SNOW ticket, focuses on customer education and data compliance requirements.

KPI Discovery



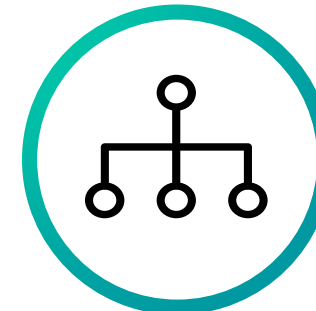
Simple workflow design for glass table, Pre-Selected and Custom KPI identification.

Service Decomp Review



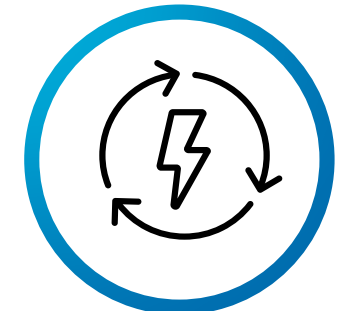
Once user has filled in all requirements, a much shorter Service Decomp Review can occur.

KPI Development



Actual build of the KPI's in ITSI. This can be done either by Splunk Admins or handed off to Professional Services with all the requirements.

Event Management and Continuous Improvement

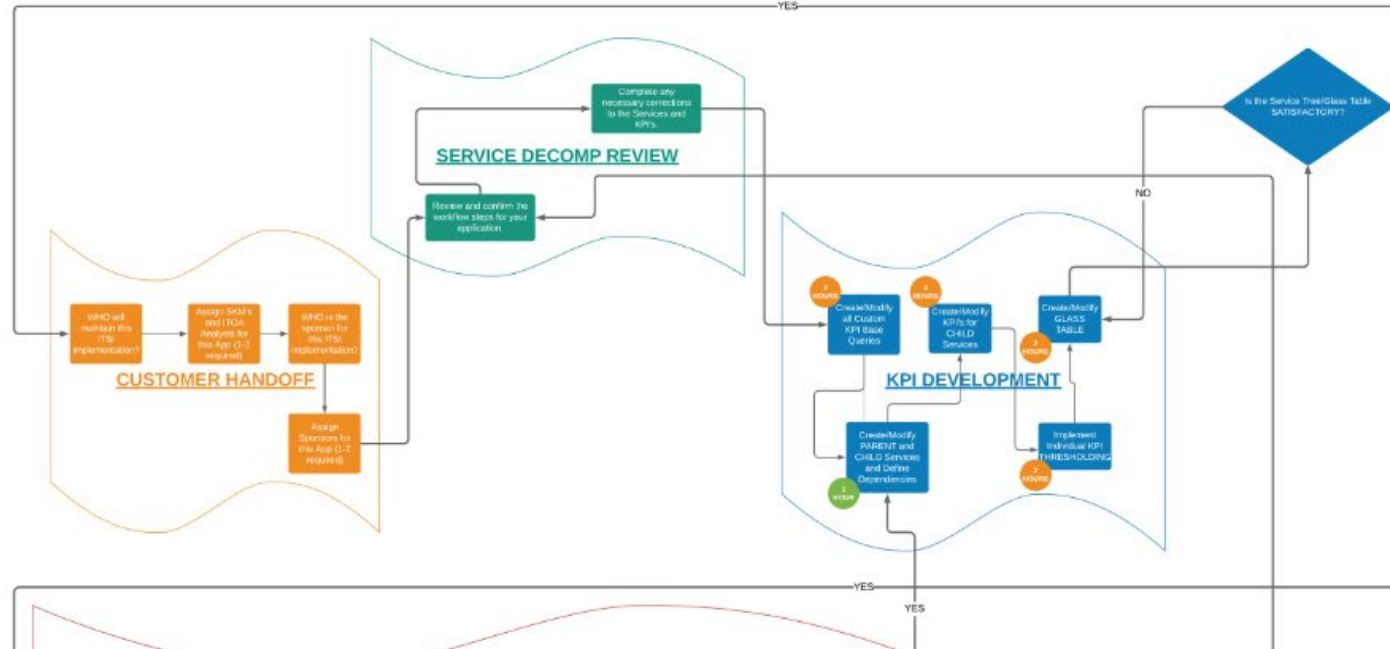
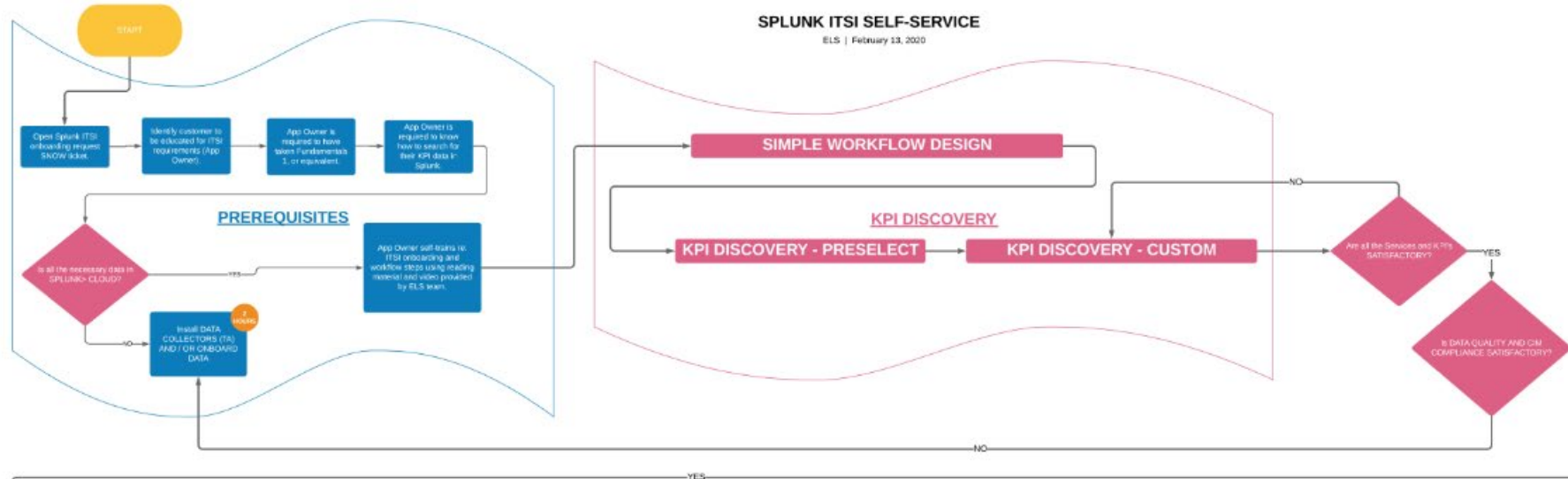


Using completed requirements to drive correlation search creation, filtering criteria, and action rules. Continue to improve via SNOW lifecycle.

So, why do it this way?

- 1) **Cox Auto's ITSI Onboarding Workflow is considered a federated, self-service model.**
- 2) **This ensures scalability at an enterprise level.**
- 3) **A significant amount of legwork and KPI discovery falls upon the app owner, since the app owner knows their data best.**
- 4) **Acquiring a workflow design that simulates the app at a high level (in advance!) helps both the Splunk Admin and the customer. This avoids the lengthiest part of a Service Decomposition – the whiteboarding.**
- 5) **Letting the customer pre-select KPI templates and using an intake form for the custom KPI's accelerates the process further.**

SPLUNK ITSI SELF-SERVICE
ELS | February 13, 2020



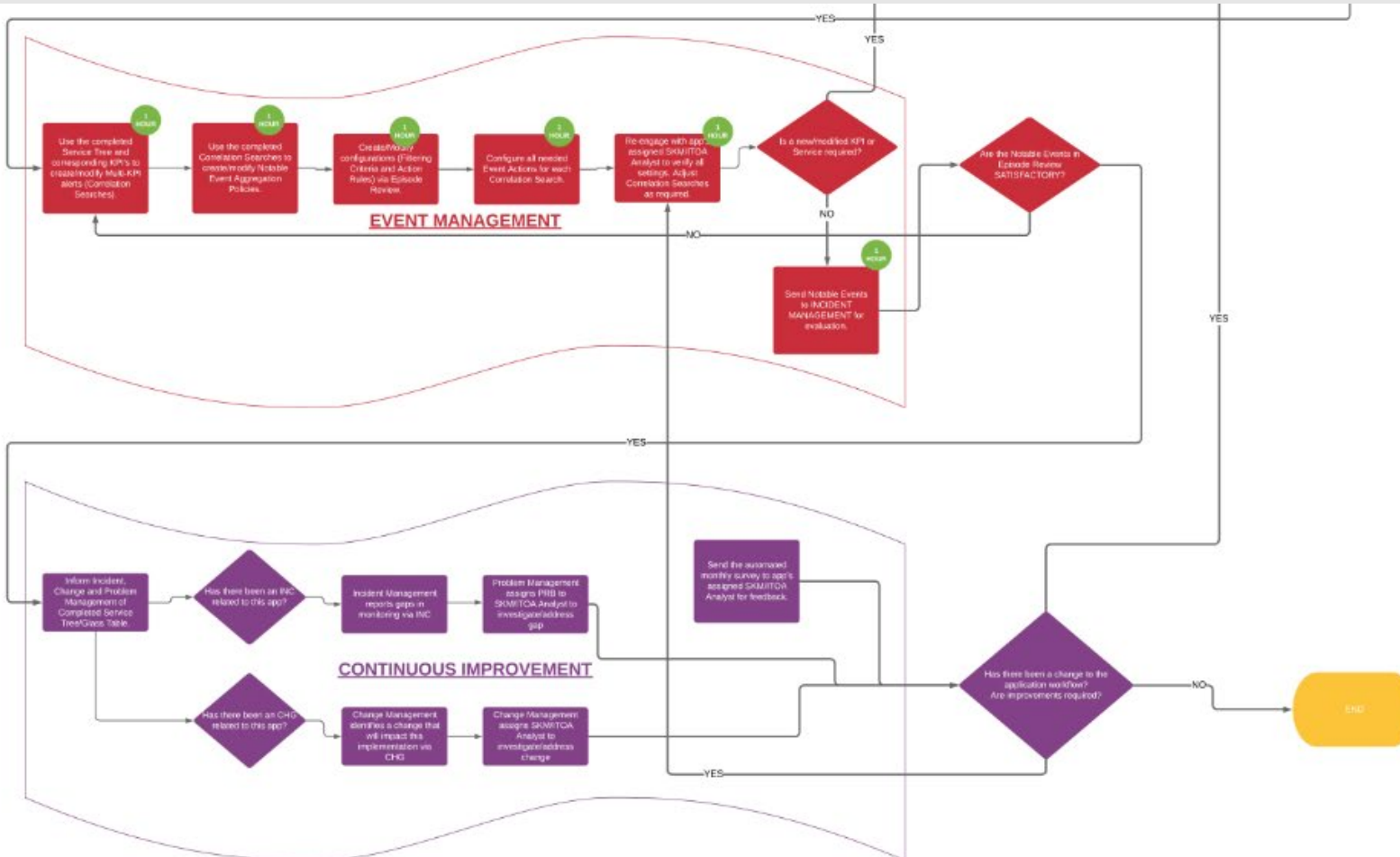
SIMPLE WORKFLOW DESIGN

Submit an image of a simple workflow for your app. Constrain your workflow to 5 high level steps with at most 3 Key Performance Indicators each.

This will serve as the template for your Custom Base KPI's.

(PROVIDE EXAMPLE)

- KPI DISCOVERY - PRESELECT**
- Pre-select from ELS ITSI Service Catalog the Approved Base KPI's that are relevant to your application.
- Tier 1
 - WEB SERVER (IIS or APACHE)
 - APPLICATION SERVER (TOMCAT OR WEBSHERE)
 - DATABASE (MYSQL OR ORACLE)
 - Tier 2 (Based on Tier 1 answers)
 - OS (WINDOWS OR LINUX)
 - Other
 - LOAD BALANCER (F5)
 - Tool Integrations
 - APM (New Relic or AppDynamics)
- (PROVIDE EXAMPLES)



Tool Integrations
 APM (New Relic or AppDynamics)
 (PROVIDE EXAMPLES)

KPI DISCOVERY - CUSTOM

Identify your Custom Services and KPI's that are not covered by Step #1

Use your Simple Workflow Design image to satisfy below requirements.

- A - Name of Service (i.e. Step 1 - Application Submit, Step 2 - Application Acknowledged, etc)
- B - Name of KPI for your Service (i.e. Success, Failed, Unauthorized, etc)
- C - Where is this data in Splunk or logging? Provide a Splunk search string that identifies this KPI.
- D - Proposed Thresholds for each KPI (i.e. Static (i.e. Critical >5, High >3, Low 0-2) for Failure)
- E - Weight or Criticality of this Service to your Application (static score of 5 (moderate) - 10 (very important))

Repeat process until all Custom Services and KPI's have been identified. There can be up to 3 KPI's for each service. If anything is missing, repeat process.

(PROVIDE EXAMPLES)



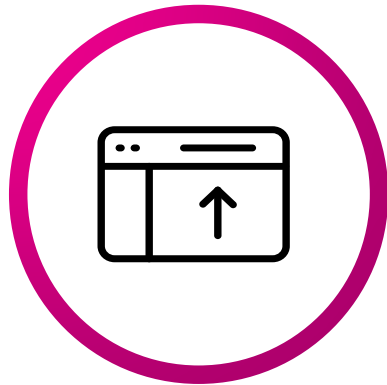
SNOW-ify!

Tying your workflow to a SNOW form

If you have SNOW, use it!

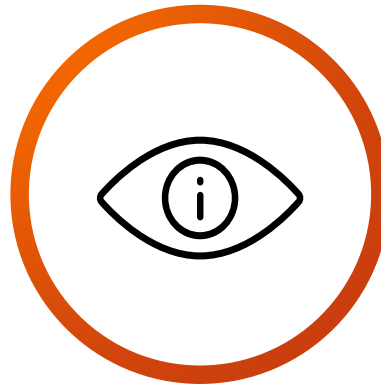
If your userbase is accustomed to SNOW intake forms, this integration is a game-changer.

Work with Your SNOW Team



Most enterprises that use SNOW have a dedicated SNOW team. SNOW's intake forms are versatile, and you can have your own custom ITSI onboarding intake form.

Ask Pointed Questions



Try not to be too wordy in your SNOW form. Use supporting documents to provide necessary details.

A SNOW Ticket Allows for Tracking and Commenting



When a form is submitted, both the Splunk Admin and the customer can communicate regarding the requirements without the need for a meeting.

* Opened on behalf of this user

ⓘ John Lim ✕ ▼

* Please select a Splunk Service:

ITSI Onboarding ▼

* Are you the data owner of this application?

-- None -- ▼

* What business unit are you with?

* Who is the SME for this application?

▼

* What is the name of your application?

* Who is the primary and backup Data owner for your application?

* Do you have a primary/backup Splunk Knowledge Manager?

-- None -- ▼

* Does your application ingest logs into Splunk today?

-- None -- ▼

* Please preselect available out-of-box Key Performance Indicators that apply to you:

- Web Server
- Application Server
- Database
- OS
- Load Balancer (F5)
- APM

Please fill in requirements for all Custom Base KPI's

* Workflow Step

* Service name:

* Splunk String

* KPI Conditions:

* KPI Thresholds:

* KPI Weights:

* Describe your troubleshooting process for this 'Workflow Step'


* Who is responsible for troubleshooting this Workflow Step?

* Would you like to add another KPI?



Add attachments

Submit

 Add to Cart



What Have we Learned?

Takeaways from our experience with
Decomp Automation.

Empower Users!

A guided user experience reduces ITSI onboarding friction.

Phased Onboarding Approach



This approach lets the users be involved in the process from Step 1. They will learn more about their app, along with learning how to use Splunk.

Create Supporting Documents and Guided Intake Form



Don't forget to create your supporting user documents! A guided intake form lets the users take ITSI onboarding step by step. Each piece builds towards the next, and the process is a little less overwhelming.

Continue to Evolve your Process!



Users will always have constant input regarding how the automation can be improved. Use these ideas to build a well-oiled ITSI onboarding machine.



Thank You

Please provide feedback via the

SESSION SURVEY

