



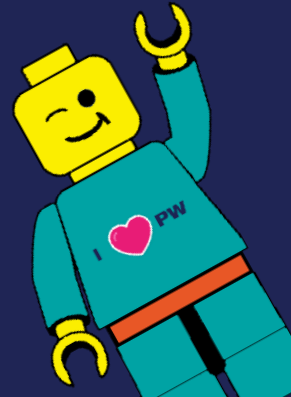
Tech
Mahindra

Fixed Right First Time: Automating Diagnostic Next-Best Actions

Brad Page & Rhonda Eller
Nissan North America
with Tech Mahindra



PW
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Agenda

- Why Are We Telling You These Stories
- Nissan North America Current Warranty Preauthorization System
- 2015 Approach
- 2018 Approach
- The Road to Success
- What We Have Now – Platform to Launch Forward

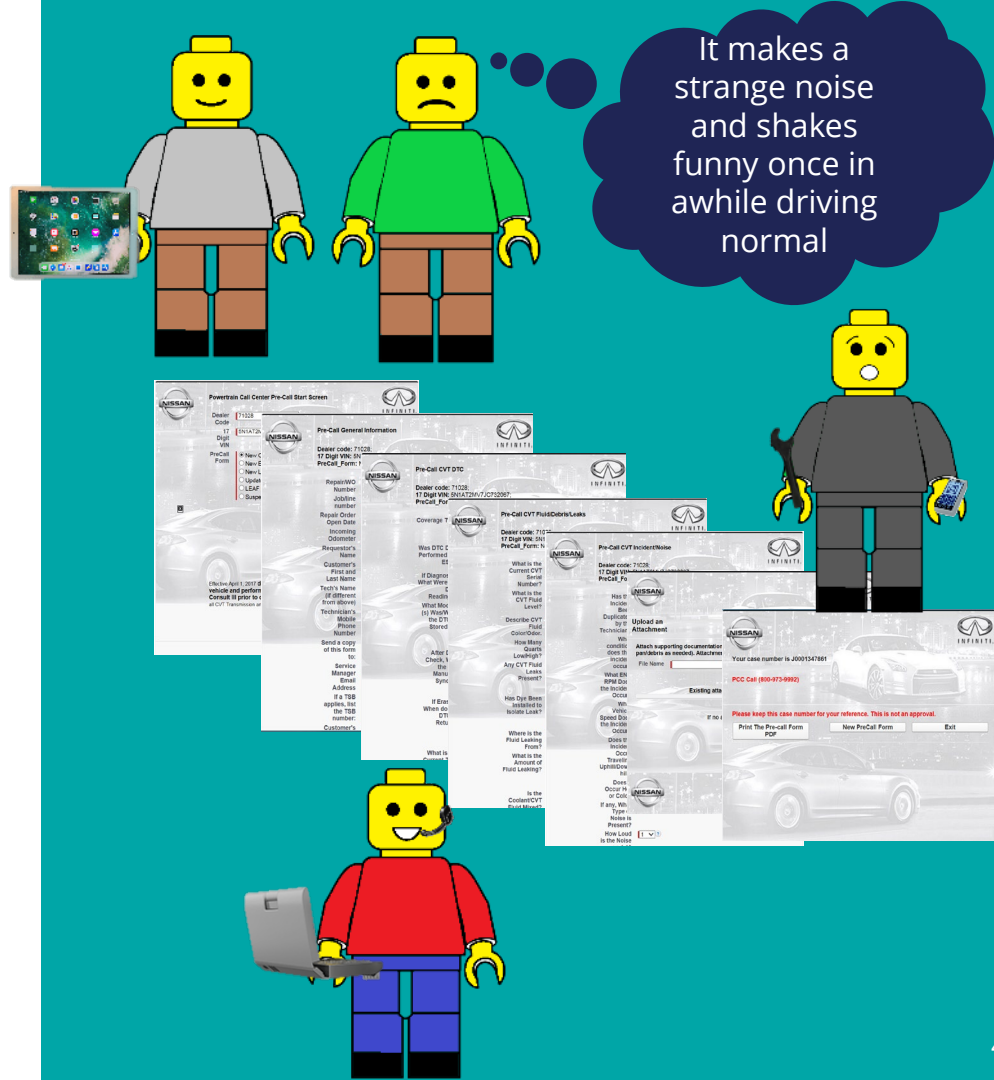


Why Listen to Nissan's Story

- Learn what we learned
- Understand importance of a common vision
- Building a functioning team
- Stake holders
- Others....

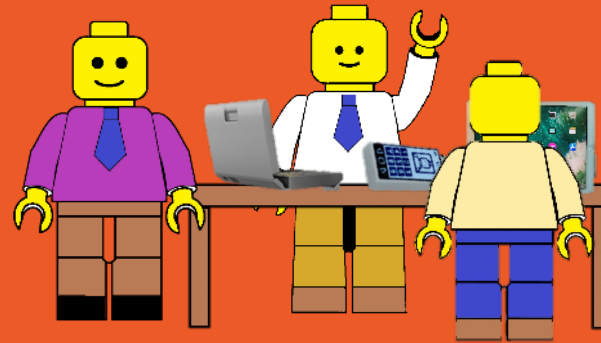
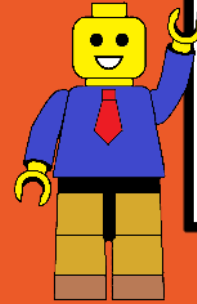
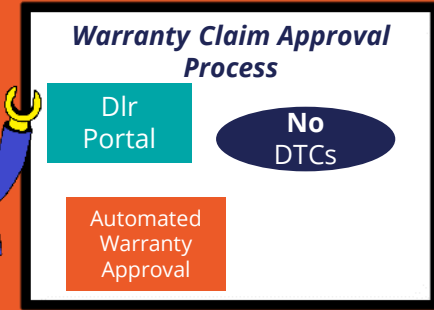
Pain Point: Current Approval Process

- Old-fashioned, manual process
- Text describes customer comments
- Technician
 - Scans cars computers
 - Reviews bulletins/publications/service manuals
 - Manual diagnosis
 - Completes NNA approval form
 - Technical / non-technical
- Technician calls NNA
- NNA agent manually processes

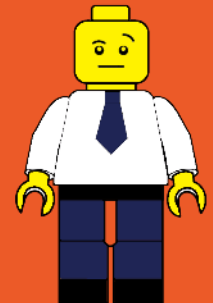


2015 Approach

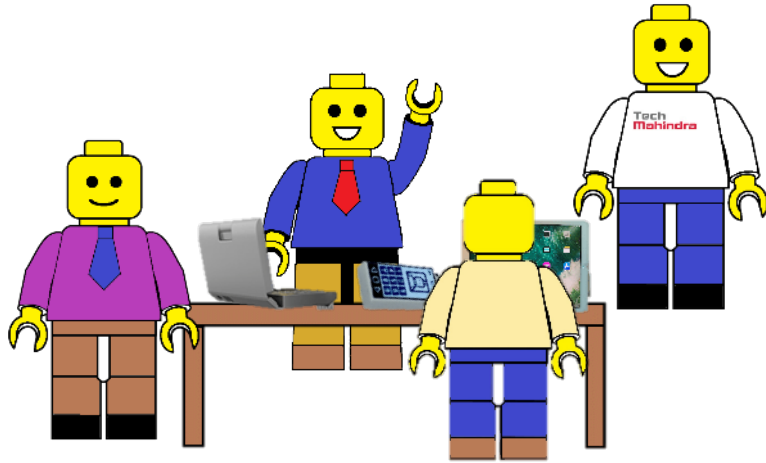
- Improve Call Center efficiency
- Reduce misdiagnosis
- Give engineering control
- Reduce over-spending
- Control via warranty approval
- Business driven with Pega Partners



When are we at the 1st Dealership?



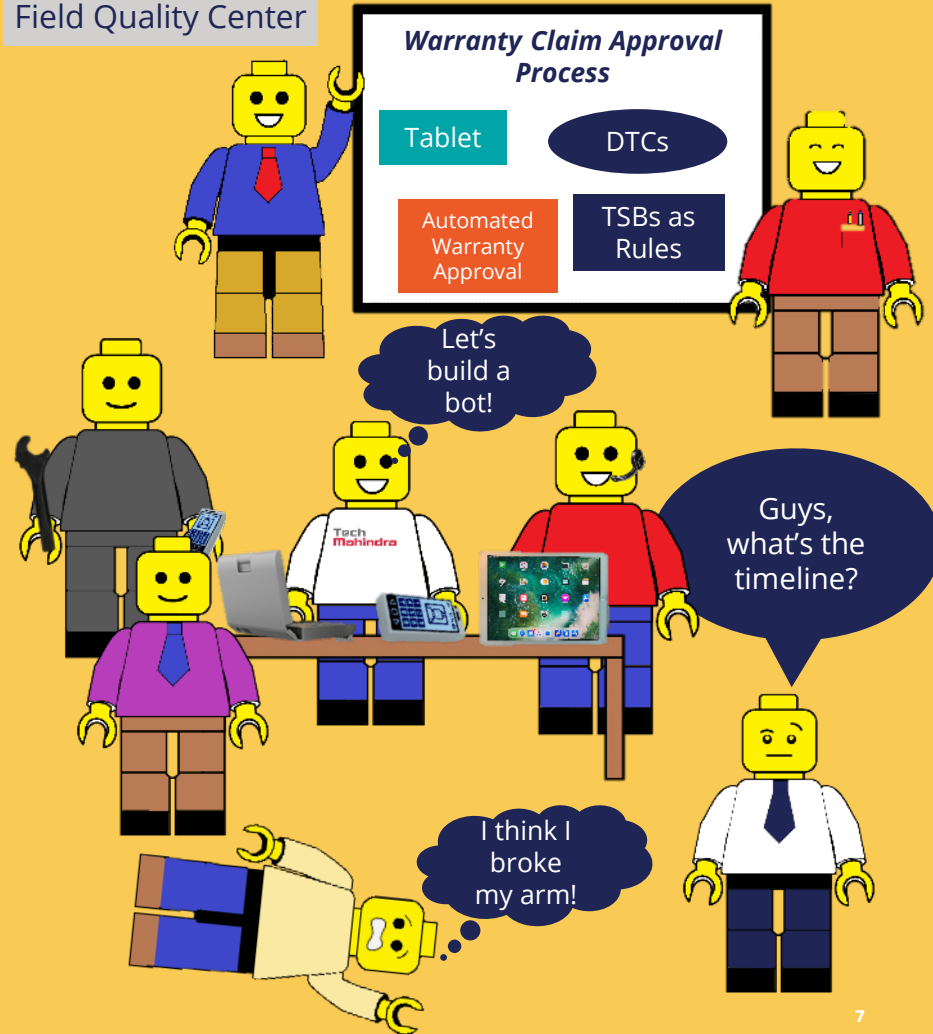
The Road to Success



2018 Approach

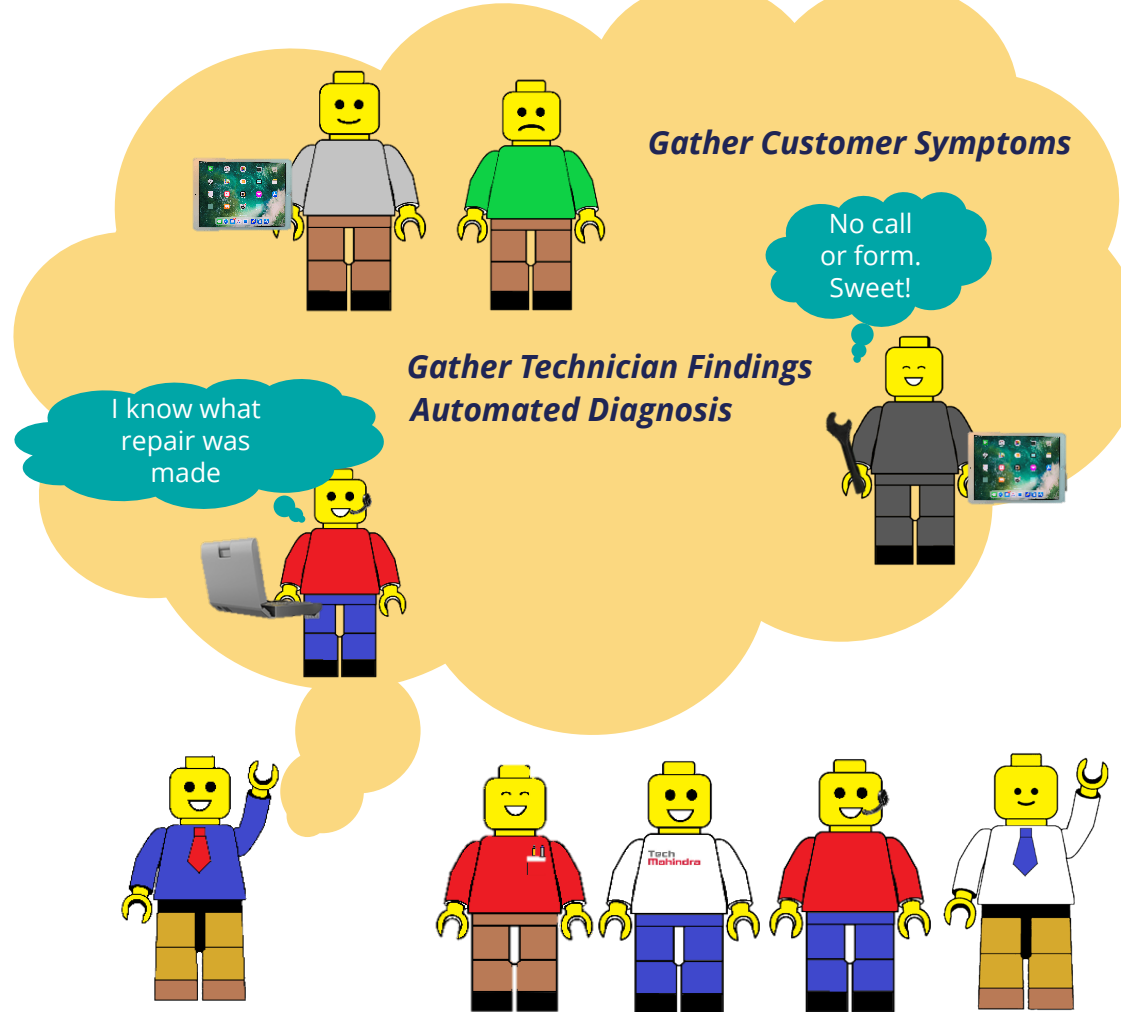
- Focus on owner
- Voice of customer structured
- Keep technicians working
- Improve Call Center efficiency
- Automate diagnosis
- Give engineering control
- Reduce over spending
- Business driven with Pega Partners

Field Quality Center



Create a Shared Vision

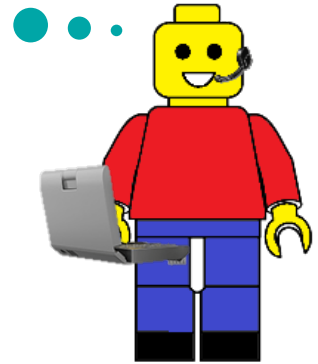
- Include all stakeholders in the discussion
- Win over the skeptics with action
- Get buy-in on a shared vision and business process



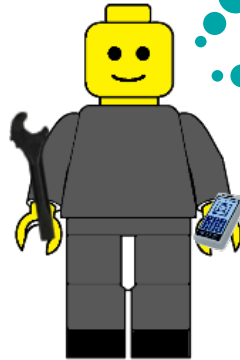
The Journey of Success

- Identify stakeholders
- WIIFMs
- Business process strawman
- Kick off meeting
- Kicking the strawman
- Leave kick-off meeting with "We can do this"
- Stakeholder sign-up for business feature design
- Address each unknown with a meeting
- Leave each meeting with optimism

I want to access my vehicle cases in 1 system.



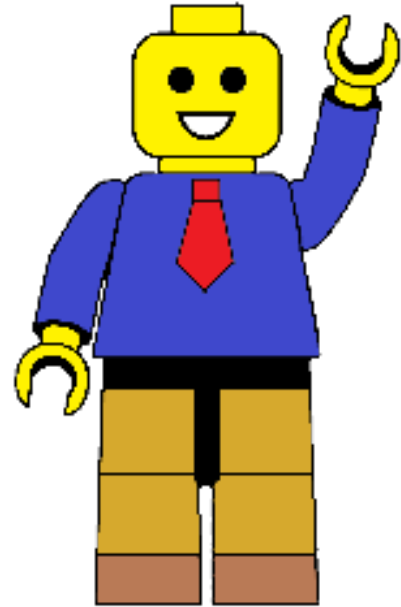
I only want to enter information relevant to my job.



Make the approval process easier.

The Right Product Owner(s) can make great things happen

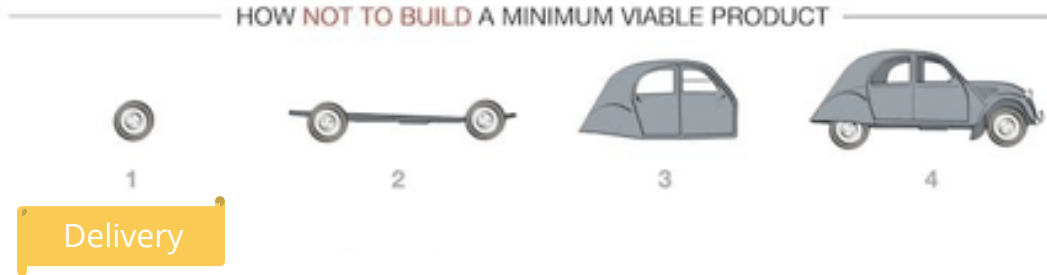
- Understand all of the Stakeholders involved in the Process and think about the impact the changes have for them
- Think Strategically, start tactically
- Question, Question, Question
- It's ok to make mistakes TOGETHER – this is how you learn
- Proactively build your test cases together
- Building the Best Outcomes takes thoughtful planning



Adapt Agile Team and Process To You

- Eliminate components that seem like overhead only
- You don't have to "follow the agile textbook"
- Leverage each person's strengths
- Get the Business BA for the IT BA
- Time for planning vs development
- Design Thinking but didn't follow a book

Get the Minimal Viable Product Right



- Built survey “building blocks” to build anything
- Complexity because no analysis of surveys in advance
- Did not have an overall process / design in mind
- Only built the diagnosis survey creation tool

Correct Minimal Viable Product



Started with the Goal in Mind

Pilot 1

- TSB Authoring
- TSB Evaluation Against DTCs
- Repair Diagnosis Result
- No Integration

Pilot 2

- SFDC connectivity
- SWS tablet connectivity
- Live DTCs
- VCAN creation

Pilot 3

- Improved UI skin
- Additional TSB authoring features

Technical Service Bulletins (TSB) As Business Rules



Technical Bulletin

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SERVICE BULLETIN

Classification:	Reference:	Date:
AT16-001h	NTB16-110h	March 13, 2018

2013-2017
DTC P077

This bulletin
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IF YOU CONF

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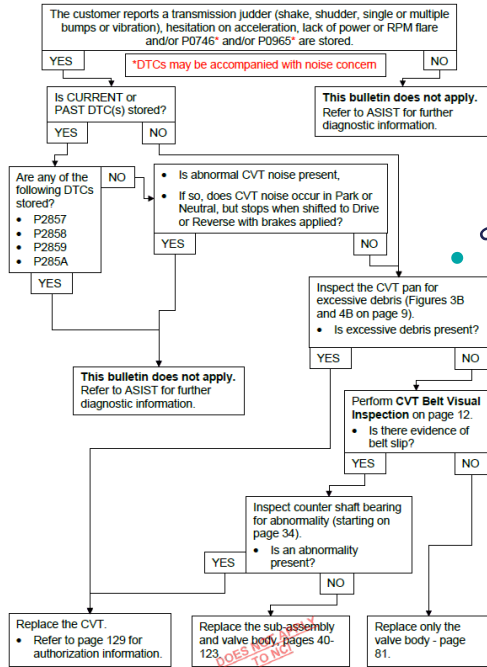
ACTION

• Refer to
CAUTION
the appr
• Pages 5

IMPORTANT:
will be perform
contains inform

Nissan Bulletins a
properly trained in
property and safe
NOT assume that

REPAIR OVERVIEW



21/28

NTB17-034e

NTB16-110

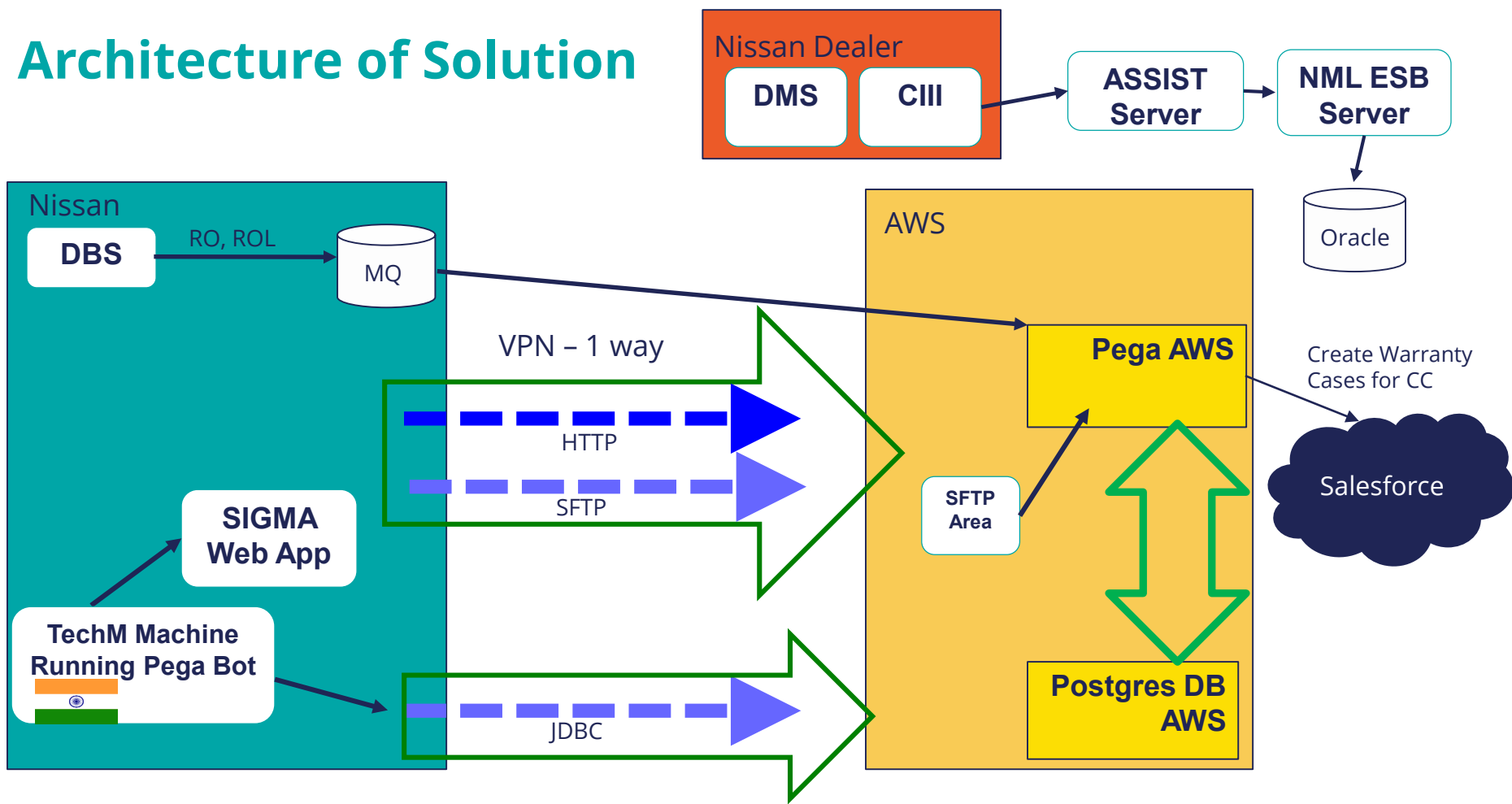
	model	model year	model year	engine	dtc/exclusions	RETURN
if	model1	>= 2013	<= 2017	EngineA	Is-16110-Exclu	TRUE
	model2	>= 2014	<= 2016	EngineA	Is-16110-Exclu	TRUE
otherwise						FALSE

NTB16-110 DTC (Is-16110-DTC)

	dtc	dtc2	dtc3	dtc4	dtc5	Customer Complaint	RETURN
if	NOT (DTC1)	NOT (DTC2)	NOT (DTC3)	NOT (DTC4)			FALSE
	DTC1						TRUE
	DTC1				DTC5		TRUE
	DTC1	DTC2					TRUE
	DTC1	DTC2			DTC5		TRUE
	DTC1	DTC2					TRUE
	DTC1	DTC2			DTC5		TRUE
	DTC1		DTC3				TRUE
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		DTC3	DTC4			TRUE	
			DTC4			TRUE	
					JUDDER	TRUE	
					JUDDER	TRUE	
		DTC3	DTC4			TRUE	
			DTC4			TRUE	
otherwise						FALSE	

• Service Bulletins Look Like Pega Decision Tables!
• Created TSB Authoring Tool
• Engineers Author TSBs

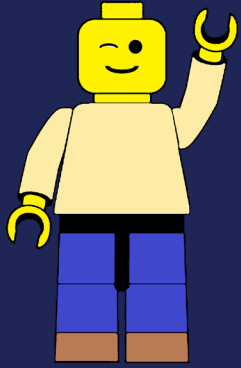
Architecture of Solution



Take Away Message

- Collaboration – broadened the team
- Minimal Viable Product to maximize re-use
- Be Willing to Adopt a Better Solution than yours
- Get the right product owner sooner





PEGA[®]
Build for Change[®]

