



Getting Your Center of Excellence Beyond the Acronyms: ALM, DevOps, ITSM

Lockheed Martin Corporation

Session ID #83393

Sandi Boll
Mike Reynolds

About the Speakers

Sandi Boll

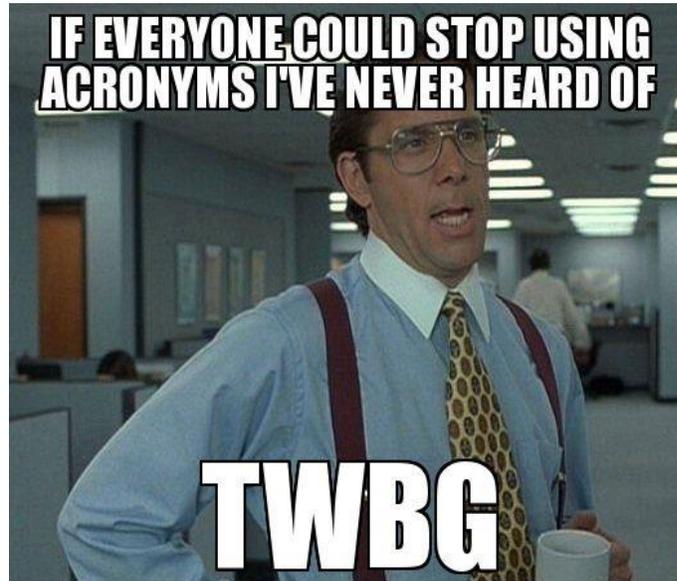
- Lockheed Martin
 - LM SAP COE – ALM Lead
- With SAP 8 years – on LM project for 2 in 1999-2001 became an employee in 2002
- Fun Fact: Worked internal systems at SAP initially – migrating off of R2

Michael Reynolds

- Lockheed Martin
 - LM SAP COE – DevOps Lead
- At Lockheed Martin for 15 Years; Web/SW Development for ~22 Years.
- Fun Fact: Hand wrote vector graphics using BASIC on Apple IIe at 12 years old.

Our Objectives Today

- Share the Lockheed “ALM” Journey
- Dig Into the Meaning of The Acronyms
- Share Some Lessons Learned



Agenda

- ✓ Who Are We?
- ✓ Where We Were With ALM
- ✓ What Changed – Why and How
- ✓ Journey Insights
- ✓ Hints, Tips

Lockheed Martin Corporation - Who Are We?



Your Mission is Ours.

Headquartered in Bethesda, Maryland, Lockheed Martin is a worldwide global security, aerospace and information technology company that is principally engaged in the research, design, development, manufacture, integration and sustainment of advanced technology systems, products and services

105,000
Employees



54,000
Scientists and Engineers



375+
Facilities
Worldwide



Operating in over
54
Countries

With **7,500+**
Employees



Aeronautics	Missiles and Fire Control	Rotary and Mission Systems	Space

- **2018 Sales:** \$53.8 Billion
- **Backlog:** \$130.5 Billion
- **Stock Ticker Symbol**
 - LMT, on the New York Stock Exchange.
 - Ranked 59th on the 2018 *Fortune 500* list industrial corporations

LM International - Cross Business Capability Integration

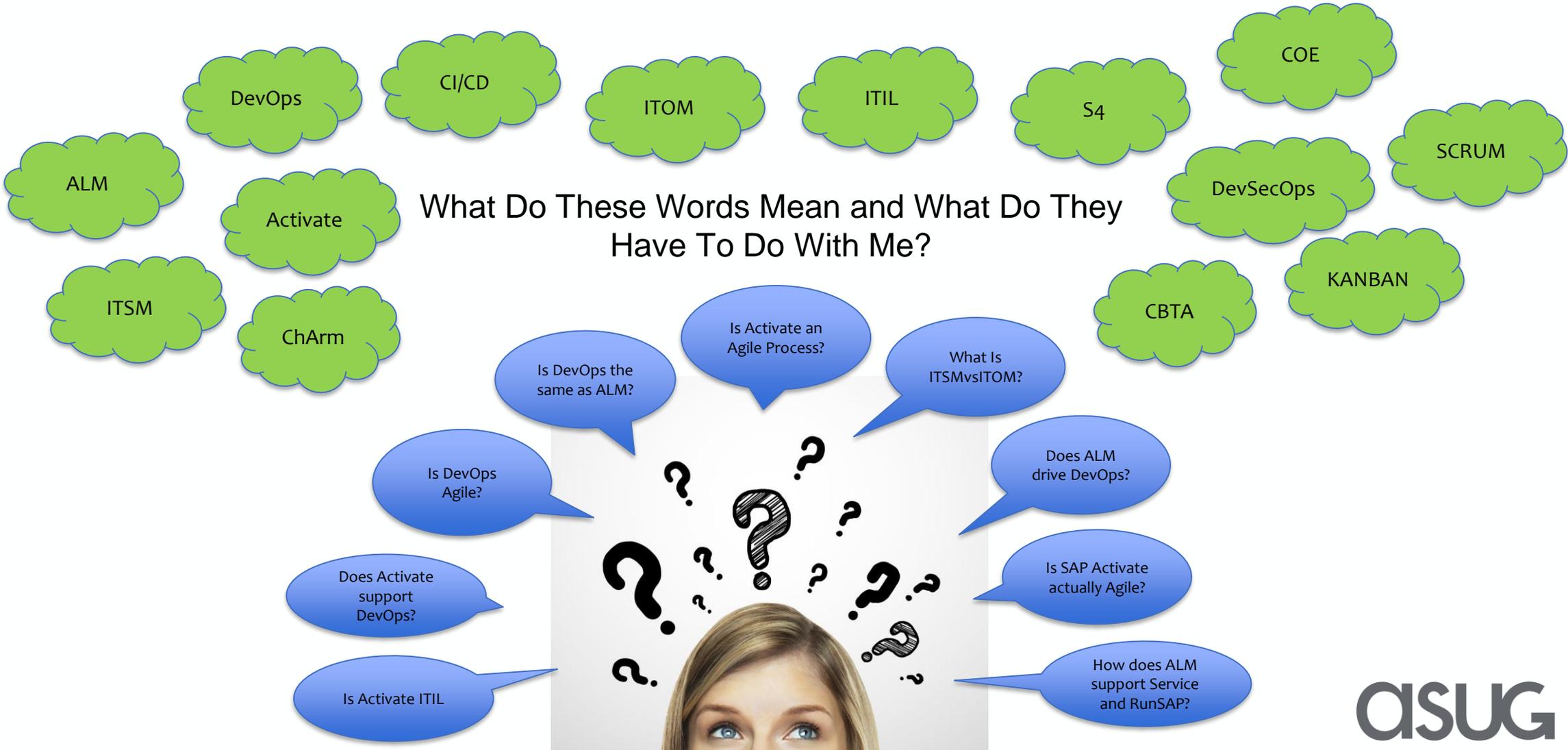


About SAP at Lockheed Martin

	Aeronautics	Rotary & Mission Systems	Missiles and Fire Control	Space	Enterprise Operations	International
Finance	✓	✓	✓	✓	✓	✓
Operations	✓	✓	✓	✓	✓	✓
Procurement	✓	✓	✓	✓	✓	✓
Analytics	✓	✓	✓	✓		✓
Learning	✓	✓	✓	✓	✓	✓

- 90 Production Systems (SIDs) in the Enterprise, plus Sandboxes, Development and Quality Environments
- Complex Deployment of Solutions Including: ECC, S/4 (Central Finance), HANA, Portal, BW, GRC, IDM, BOBJ ++
- Enterprise Solution Manager
- Max Attention Customer
- Federated COE with Matrixed Resources. Certified Since 1999.

LM SAP COE Efforts Brought This Gradual Build of Acronym Overload!!!



Acronyms As We Used To See Them

? What is ALM?

- Before 2018 – ALM = Implementations

? What is DevOps

- Before 2018 - DevOps = RUNSAP

? What is ITSM?

- Before 2018 ITSM = Incidents in Remedy

2018: Year of Go Begin vs. ~~Go Live!~~

“Go Begin” Mantra from Leadership

Software Development is No longer “Go Live” but “Go Begin”
The Optimization of your Investment



Our ALM Must Now Support “Go Begin”

Apply MVP, Continuous Improvement, Innovation, Optimization to our Application Lifecycle Management Transformation

In Other Words – ***GO BEGIN!***

- Define Our Vision and Roadmaps
- Pilot Technical Modernization and Tool Efficiencies
- Drive Common Tools and Processes
- Drive Decisions Based on Business Value

A clearly defined Application Lifecycle Management approach allows your COE to help the business continually return value on their investment.



How Did We Go Begin?

Develop a Comprehensive Vision and Objectives

- ✓ Drive Enterprise Process and Tools
- ✓ Fail Fast (or Succeed Sooner)
- ✓ Integrate, Automate, Innovate!



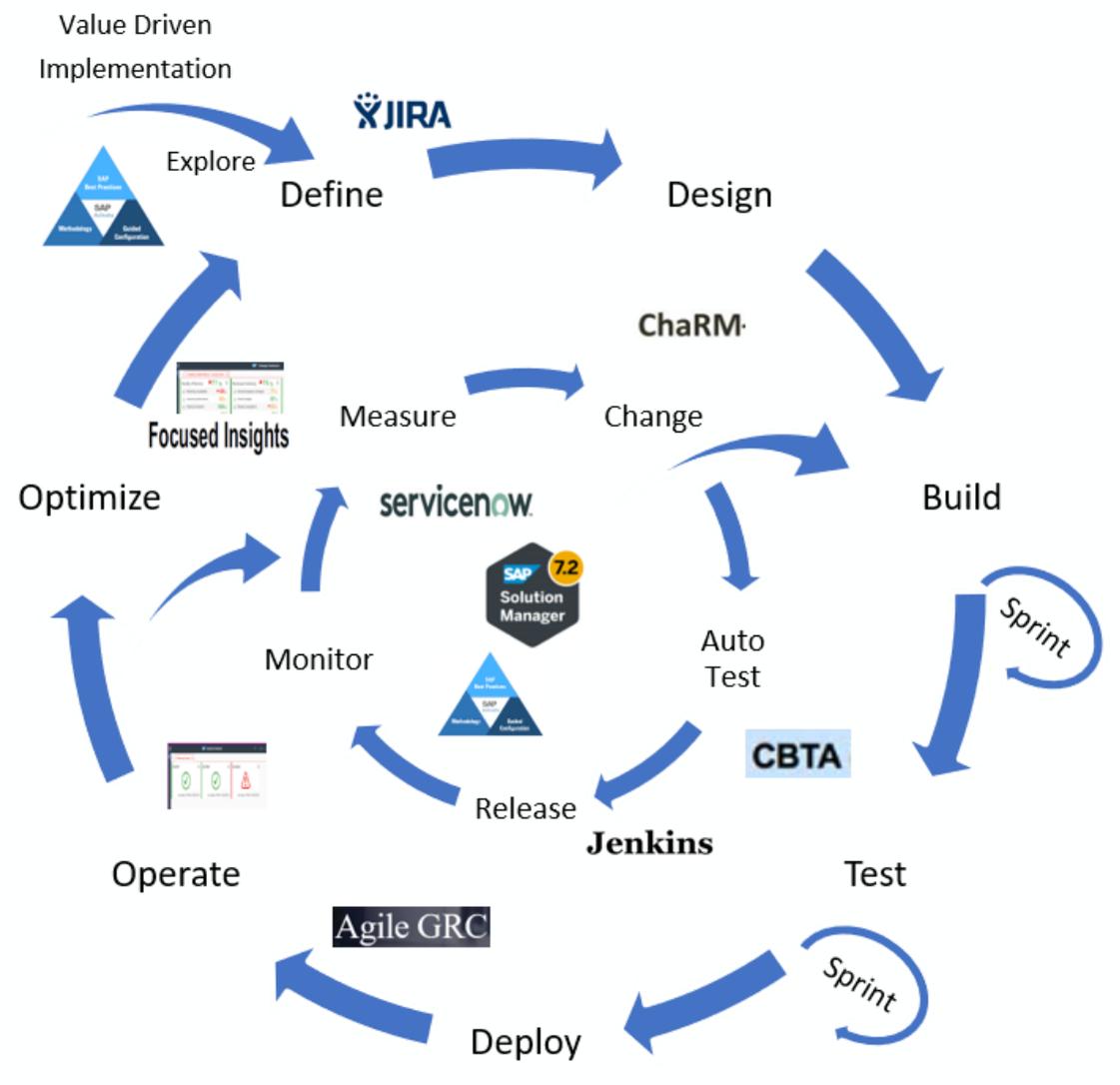
Gather Information from the Trailblazers and Experts

- ✓ Learn From Those Who Went Before Us!
- ✓ Go Directly To the Sources!
- ✓ Work Closely with SAP



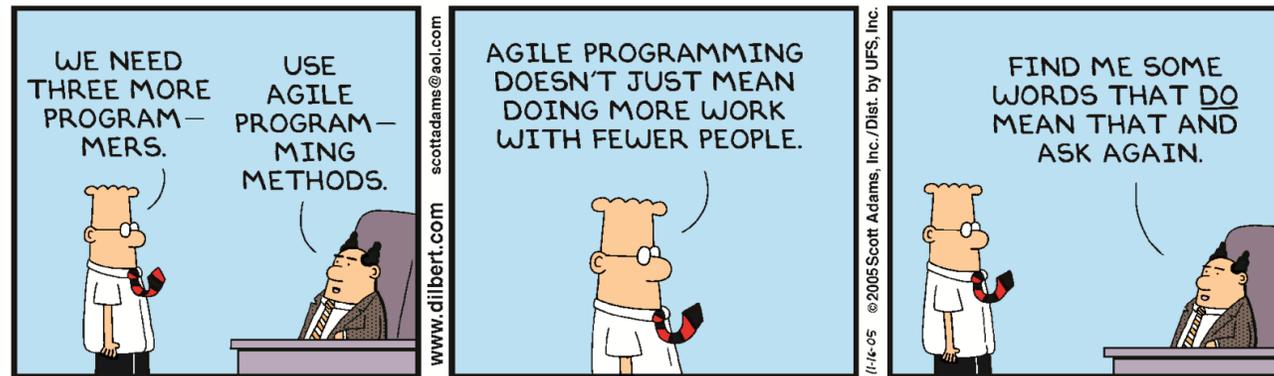
Create Your Vision – Where Do You Want To End Up?

Holistic,
integrated,
automated,
innovative,
processes
– driven by business
value and data driven
decisions



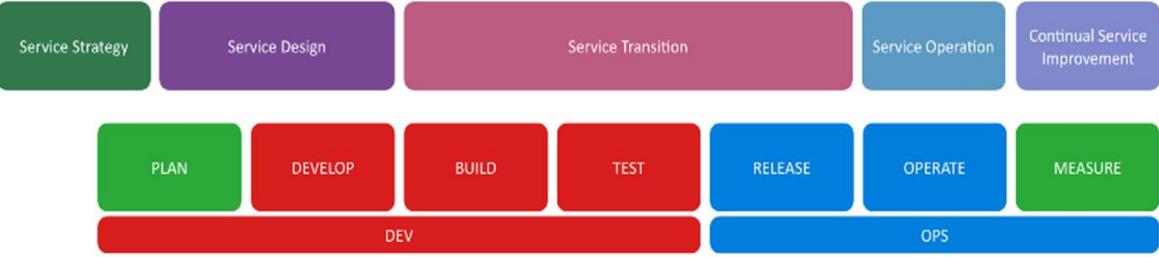
Now Where To Start?

- With Investigations, Small Steps and Our Vision
 - Updated Process and Methodology
 - Activate and Agile
 - Look To Innovate with Agile and DevOps Principles
 - Concepts, Tools, Pilots
 - Find The Right People

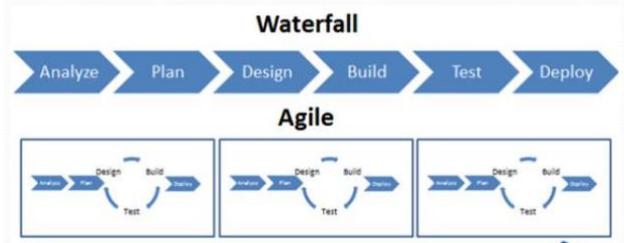


Looking At "Process" There Are So Many Ways To Go Begin How Can We Define Ours?

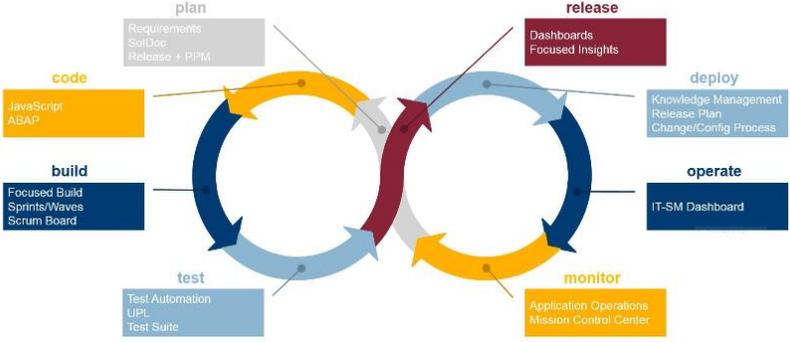
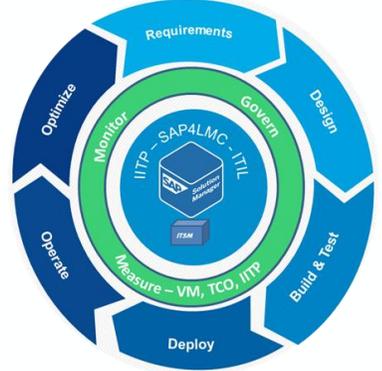
ITIL Service vs DevOps



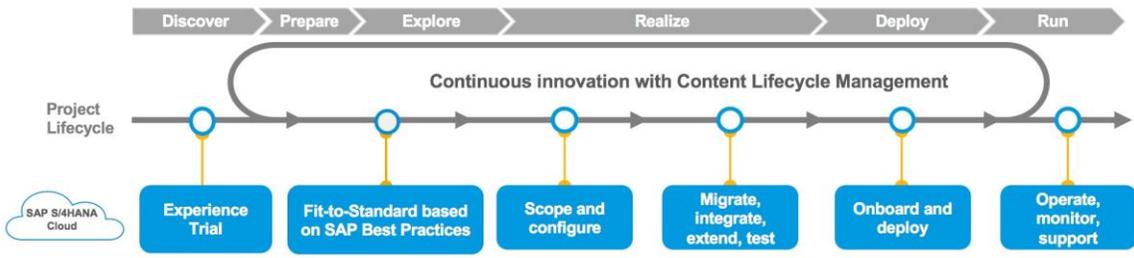
LM IITP



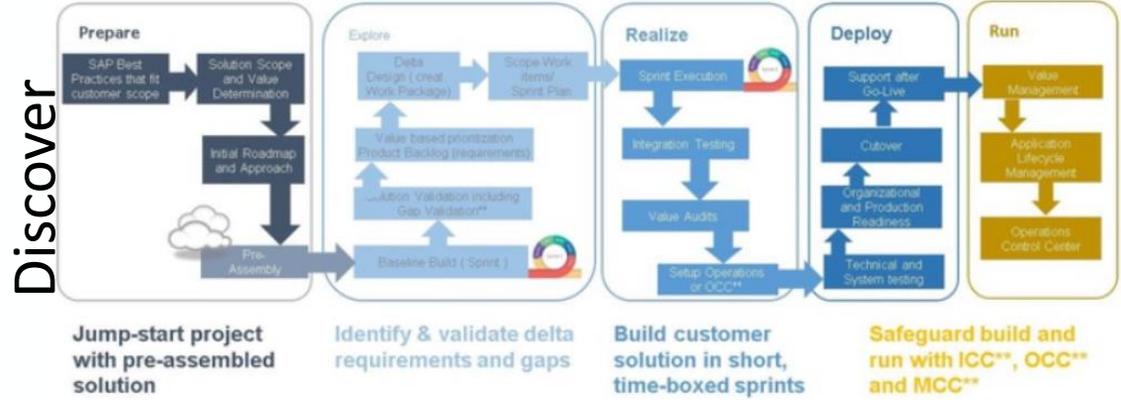
LM ALM



DevOps in SAP ALM



SAP Activate



What Did We Do? Redefined A Process That Works For Us

➤ Can We Integrate Activate into our Internal Process?

- SAP4LMC was based on ASAP
- Updates for LM Waterfall and Agile
- Activate Training and Deep Dives
- Start With DevOps for O&M ←
- **Go Begin with Service from the start**



- Lockheed Corporate Process
- More Agile
- Service
- Optimization

➤ Let's Baseline Activate/Agile for LM SAP

- Create Epics – Apply Agile to Our Agile Transformation
 - It's ok to iterate as you learn –
- Agile Training for the PMO – Scrum Master, PM, Product Owner, Team Leads, *Agile Coach*
- Identify Ways To Start SAP Agile/Activate for LM
 - Select which Agile - Kanban, SaFe
 - Pilot on Enhancements/Continuous Optimization Efforts
 - Begin to shift the conversation
 - Build a roadmap that works for you!
 - It's ok to be a little bit agile

The current IITP Service Process doesn't support DevOps principles/Agile

Continous Update of IITP Resource Process Documents for Agile Planning
Problem Statement: The current SAP process doesn't support the SAP Activate Process, is not agile and doesn't scale for Risk Planning

The current IITP Service Process doesn't transition well from Development to Service



Now Let's Define What ALM and DevOps Are To The COE!

Sent out a call to build a team of like minded people to look at what DevOps means across the LM SAP community



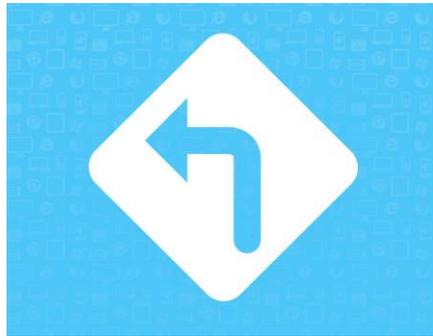
Let's go investigate together!

We Investigated DevOps Concepts

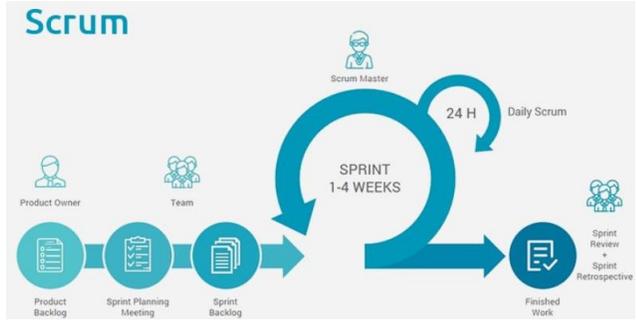


Risk Based Governance

~~CULTURE SHIFT~~
Culture Shifts



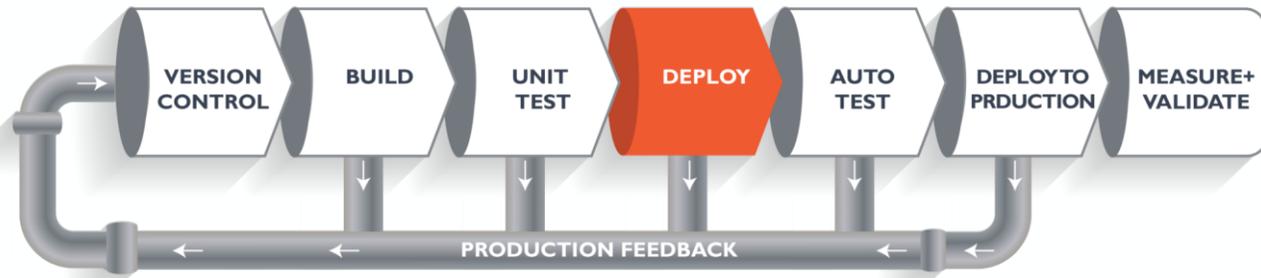
Shift Left



Agile



Automation

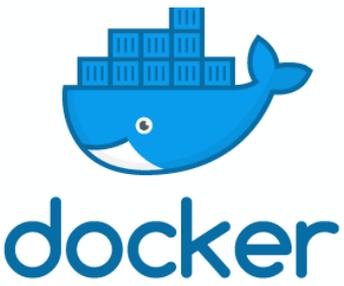


CI/CD

We Investigated DevOps Tools



Jenkins



ASUG

How Does It All Apply to SAP?

- Configuration
- Roles/Security
- ABAP
- UI5 / Fiori

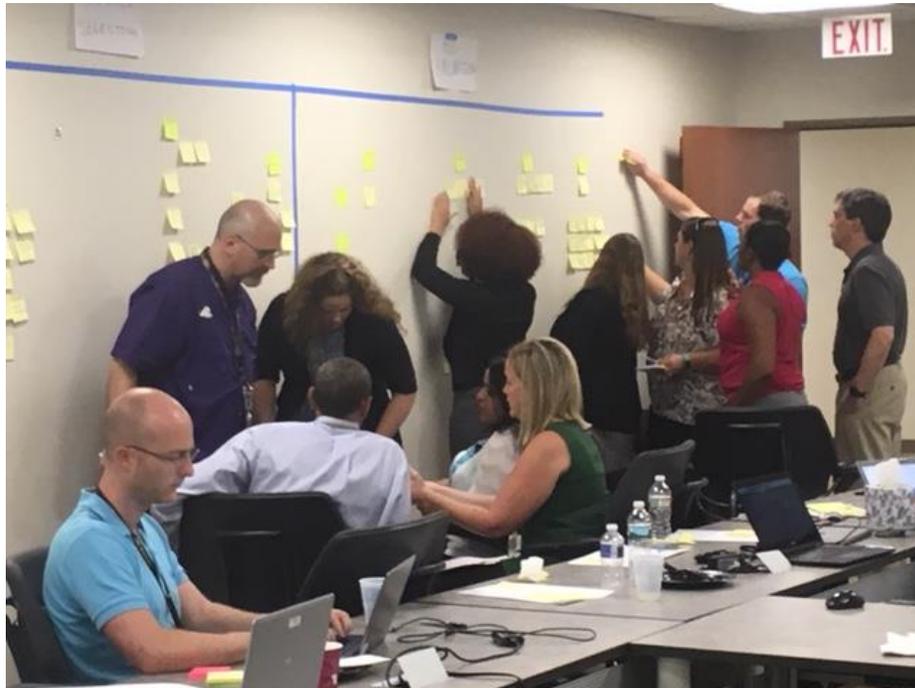
- Transports
- SAP Portal
- 3 Tier / 4 Tier On-Prem and Hybrid Landscapes

CI/CD SEA MVP
COE ITSM ITIL ITOM
CBTA BPCA RBG
DevOps



Now Let's "Go Begin" Our Journey!

- Brought together our like minded folks across LM SAP community
- Held Face To Face story mapping session for our DevOps ideas
- Used Agile principles to develop DevOps adoption framework!
- Established an "MVP" for 2018/2019 based on highest business value



Brainstormed ALM and DevOps “Features”

Top Features Identified:

- ALM with Solution Manager Suite
- Agile (using Scrum and Kanban, maybe SaFe)
- SAP Activate and Focused Build
- Test Automation with CBTA and Other Third Party Tools
- CI/CD using Jenkins in Docker Containers and SAP’s Project Piper
- Web Applications using UI5/Fiori with WebIDE and BitBucket
- ABAP Unit for Automated Unit Testing
- Rapid Application Development with Fiori Elements and Mendix
- Automated / Scheduled Refreshes using Landscape Manager
- Tasktop Integration Between ServiceNow and JIRA
- And others!!

Focus on The Highest Business Value

Who Can We Get to Help?

- No dedicated organization/resources for “DevOps”
- We needed people who were willing to challenge themselves for things they love and believe in
 - Isn't limited to just developers!
- We needed **AGENTS OF CHANGE!** Super Heroes! Advocates! We got them!
 - Established a bi-weekly Community of Practice
 - Semi-Regular Face To Face meetings
 - Sharing of experiences across the community with goal of enterprise process adoption



“Go Begin” Working Our Features

- Proof of Concept / Pilots
- Solution Prototypes



Some Key Pilot Efforts



- ### Various Pilots Of Solution Manager ALM Services
- Business Process Hierarchy
 - BPCA – Business Process Change Analyzer
 - SEA – Scope and Effort Analyzer
 - CBTA – Component Based Test Automation
 - TBOMs – Technical Bill of Materials
 - Focused Build
 - Focused Insight Dashboards
 - Charm – (White Listing)

- ### Pilot of Agile Kanban Process
- Supply Chain Enhancement Project – including use of Jira and Charm

- ### Rapid App Development Pilots
- Mendix
 - Fiori Elements

- ### Automated Testing Pilots
- SolMan CBTA
 - Katalon
 - Testimony

- ### Deep Dive of Activate Pillars
- To Integrate DevOps Principles into Methodology
 - To Strategize Focused Build and delivered content use
 - For S4 Transformation Readiness

- ### CI/CD Using Jenkins and Project Piper for UI5
- Automated Builds on GIT Commit
 - Automated Deploy to Transport Request

Challenge: Build, including automated tests, and deployment to ABAP FES for Fiori applications on NW < 7.50.

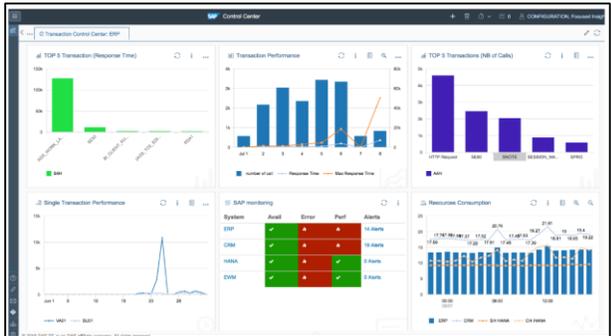


Agile for ALM – Our Backlog

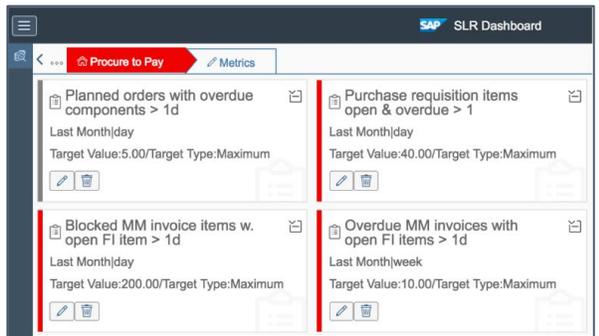
- Adoption of SolMan services to support ALM vision is key
 - DevOps Pilots provided insights on best value starting points
- Holistic, Integrated, End To End ALM Solutions As Part of Our Vision
- Data Driven Decisions from Dashboards



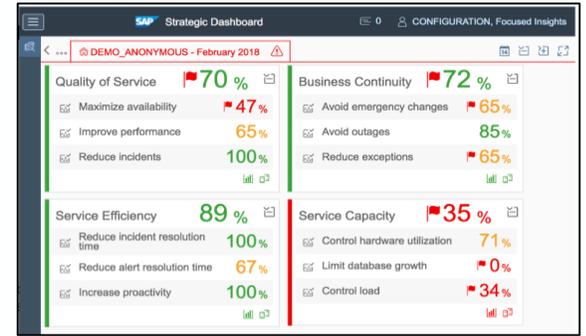
SAP
+
servicenow



Control Center



Service Level Dashboard



Strategic Dashboard

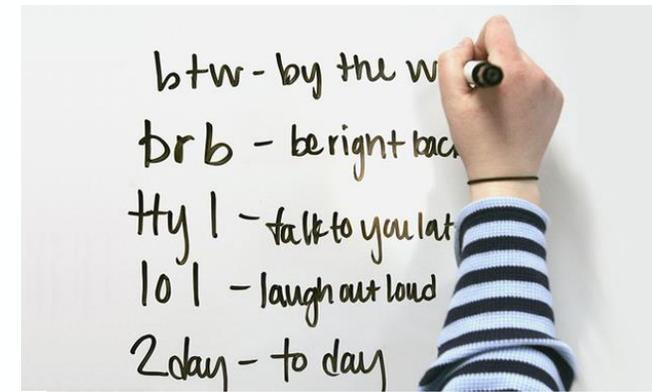
So?

Acronyms As We Used ^{NOW} To See Them

- ✓ What is ALM?
 - Application Lifecycle Management is the complete care of your SAP systems – from implementation to enhancement ending only upon retirement.
- ✓ What is DevOps
 - DevOps supports the pieces of ALM that are the practice of agile development and operations driven by objectives of innovation, automation and optimization.
- ✓ What is ITSM?
 - IT Service Management is not enough. A comprehensive ITSM, ITOM, Change, Problem, Helpdesk/Self Help solution will allow your ALM and DevOps teams to set the right – data driven – goals, metrics and measurements and priorities.

Lessons Learned

Build your big picture ALM vision and spell out what it means to your organization!



- Start with a methodology that works for your organization – a little agile is ok!
- But everyone needs to understand Agile and ALM if you want to change your culture
- Activate can be Agile but is not really ALM
- Service is where you live – drive towards automation, integration, innovation and optimization

- Before you buy something else - look to leverage Solution Manager!
- It's ok to start small and fail fast (or succeed sooner) - just start with something!
- Build upon your successes
- Look for pilot/proof of concept opportunities
- Find the right people!
- Put something into Prod ASAP

APPLICATION LIFECYCLE MANAGEMENT

Find Your People!



Define Your Vision!



Start With One Step!



Go Begin!

Take the Session Survey.

We want to hear from you! Be sure to complete the session evaluation on the SAPPHIRE NOW and ASUG Annual Conference mobile app.



Presentation Materials

Access the slides from 2019 ASUG Annual Conference here:

<http://info.asug.com/2019-ac-slides>

Q&A

For questions after this session, contact us at

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