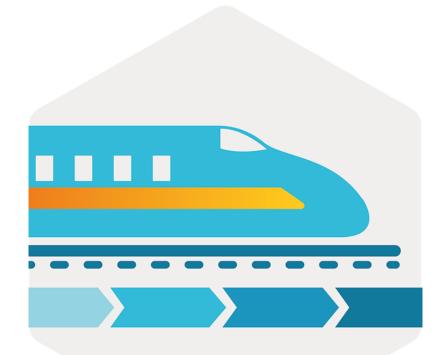


# QA Practices in large SAFe



Szilárd Széll

05.10.2022



### Szilárd Széll – intro



#### **Experiences**

- 5G DevOps transformation lead and Senior Consultant at Eficode
- Test Coach and DevOps Evangelist in NOKIA (for 19 long years)
- Former President of the Hungarian Testing Board
- Processes Management and Compliance Work Group Chair of ISTQB
- Program Committee Member of UCAAT, HUSTEF, and EuroSTAR2021 conferences

#### Certifications

- DevOps DASA Foundation, SAFe SPC, Certified Scrum Master
- ISTQB CTEL-ITP-Full, CTAL-TM, CTFL-AT, CTFL
- IREB CPRE
- Lean Six Sigma Green Belt
- Lean Service Creation Facilitator

# **Eficode expertise**









DevOps and cloud transformation

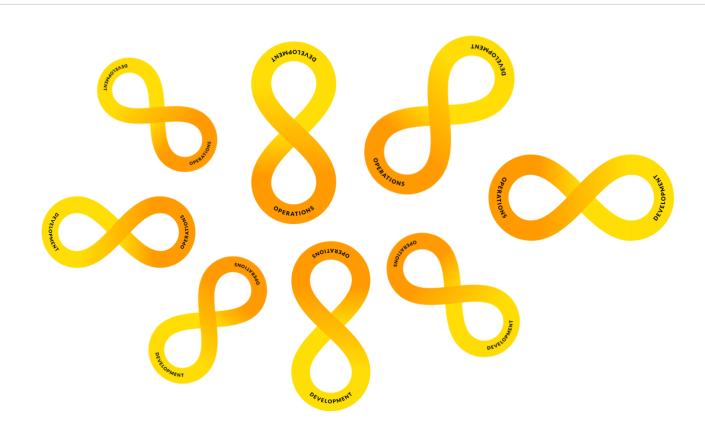
Eficode ROOT DevOps platform

SAFe tranformation partner

**Atlassian** solutions



# Multi-vendor Telco DevOps challenge

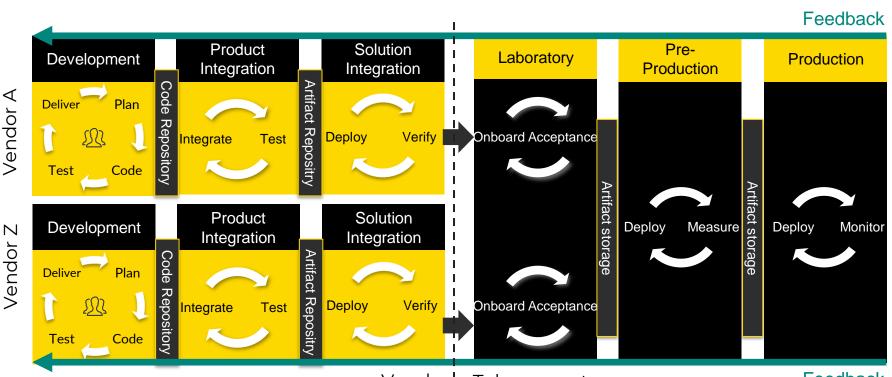




# **Multi-vendor Telco DevOps goal**



# **Multivendor DevOps pipeline**



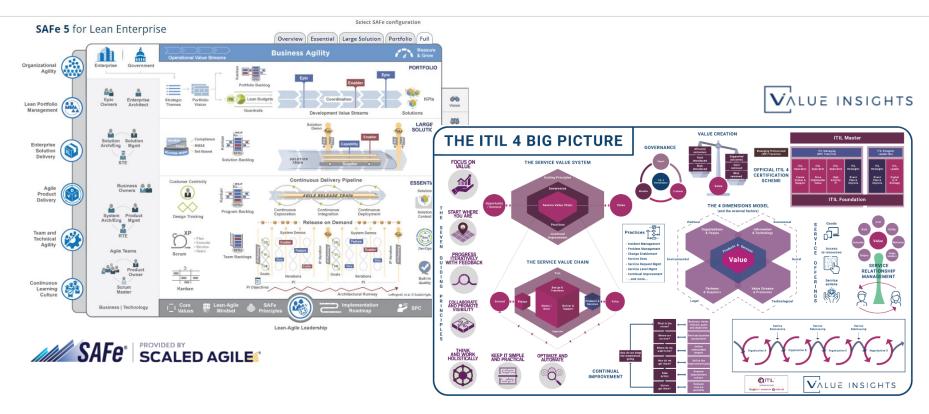
Vendor!

Telco operator

Feedback



# The landscape: SAFe + ITIL





Describe our Continuous Quality Assurance process based on SAFe and Risk based Testing approach, utilizing the CI/CD pipeline with dynamic quality gates, and automation in all stages of the verification process

Expectation towards Continuous Quality Assurance Strategy

# Layers of the Continuous QA Strategy

SAFe cadence

# Scaled Agile Way of Working

- Responsibilities: Agile teams, System Teams
- Backlog analysis: Roadmaps, DoR, DoD, NFRs, AC
- Way of Working: QA collaboration practices and templates

# Value Flow and Test Activities

- Deployment flow per network service
- Regression Test and Acceptance Test activities within flow
- Dynamic Quality Gates

CI/CD pipeline and automation

- Pipeline preparation
- Test Automation tool onboarding
- Initial Test Case Automation and Keyword creation





# **QA Roles and Responsibilities within teams**

#### **QA Lead**

- Mapped into a SAFe Architect role
- Change agent in QA (Quality Assistance)

### Agile teams

- System Integration and configuration
- Feature level test analyses and execution

## System team | CI/CD team

- Solution integration
- Solution level test analyses and execution

- CI/CD Pipeline development
- Automation Enabler Development
- Providing selfservice automation platform

#### **Product Owner**

Community of **Practice** 

#### Scrum master

Community of **Practice** 

#### **DevSecOps**

Community of **Practice** 

QA

Community of Practice

Automation is everyone's responsibility: the team that designed the test case is responsible for it



# Backlog analysis: Roadmaps, DoR, DoD, NFRs

## Roadmaps

- Update CQA Strategy in line with Cadence
- Enabler EPICs to build CQA Architecture Runway

#### DoR

- Testable Value
- Acceptance Criteria
- Identify Testing Enablers
- Agile team and/or System team scope

#### DoD

- Acceptance Test and Validation
- Fault status
- Operational Readiness
- Regression Test update

#### NFR

- Deployability
- Observability
- Security
- Reliability
- Performance
- Usability



# QA collaboration practices and templates

# DoR, DoD template

- Supports
   Backlog item
   Analyses
- Ensures testable Acceptance Criteria

# **Quality Gates**

- Derived from Entry, Exit criteria
- Helps to identify support tasks (Testing Enabler)
- QG fulfilment check within the CI/CD pipeline

## **QA Plan template**

- Failure modes and priorities for Risk Based Testing
- Acceptance and Regression tests
- Test flow in CI/CD pipeline
- Testing related Solution Intent documentation

# **Test Management**

- JIRA Xray for full traceability
- Automatic upload of test data from CI/CD pipeline
- Exploratory Test results
- Fault Dashboards



# Change of perspective from TM to QA

#### test management

The planning, scheduling, estimating, monitoring, reporting, control and completion of test activities.



#### quality assurance (QA)

Activities focused on providing confidence that quality requirements will be fulfilled.



### quality assistance

An approach to quality management that focuses on a quality culture throughout an organization.

# Key take away

**10.** Transition from Test Management to Quality Assistance is key

**02.** Tailoring SAFe shall not mean keeping waterfall testing practices

03. Collaboration in a QA Lead role is even more important then before

**04.** Successful SAFe relies on successful DevOps transformation

# Thank you!

#### **Szilard Szell**

https://www.eficode.com/szilard-szell

## **Further Reading**

https://www.eficode.com/pipeline-game

https://www.eficode.com/blog/lego-devops

https://www.eficode.com/blog/5g-withorganizational-transformation

