



BizDevOps and IT Service Mgmt at Swisscom

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2022-09-07



Our Journey

2015
Functional Silos

2016
Bimodal IT

2017
DevOps & BizDevOps

2018
Swisscom Agility



Dev

Ops



DevOps



BizDevOps

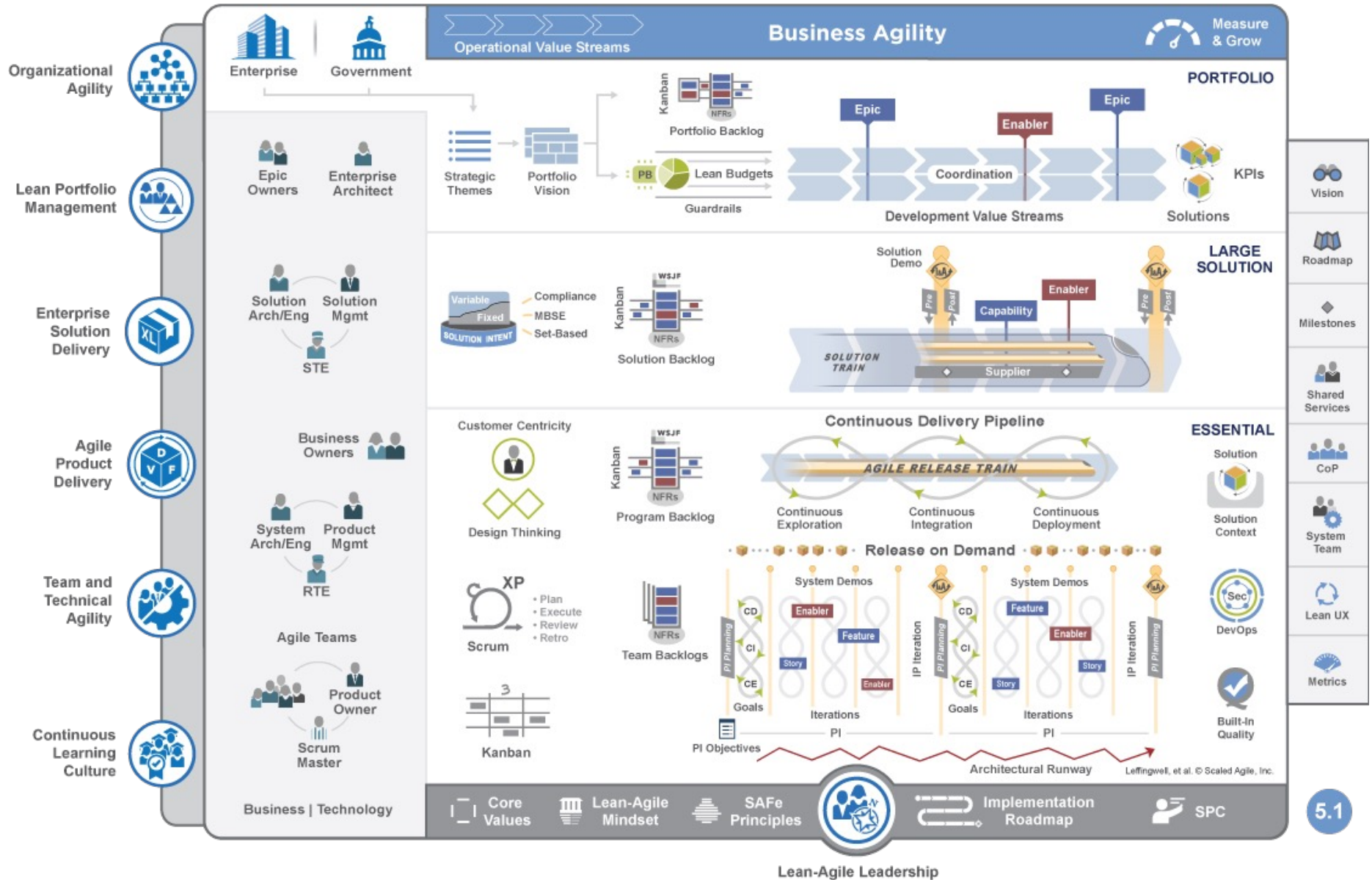


BizDevSecOps



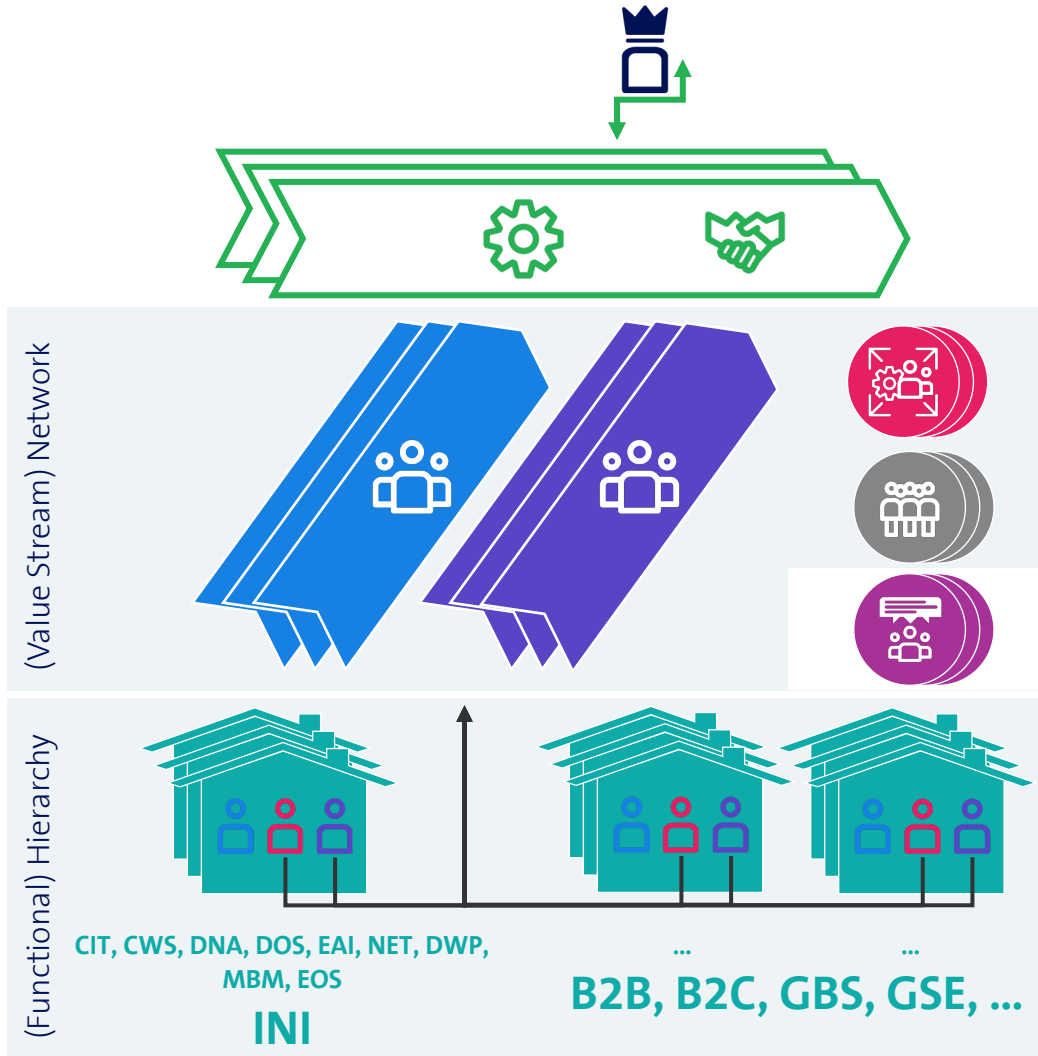
Scaled Agile Framework (SAFe)

Matías E. Fernández, 2022-09-08, BizDevOps and IT Service Management, C2 General





Big Picture of Organisational Setup for New Ways of Working (NWoW)

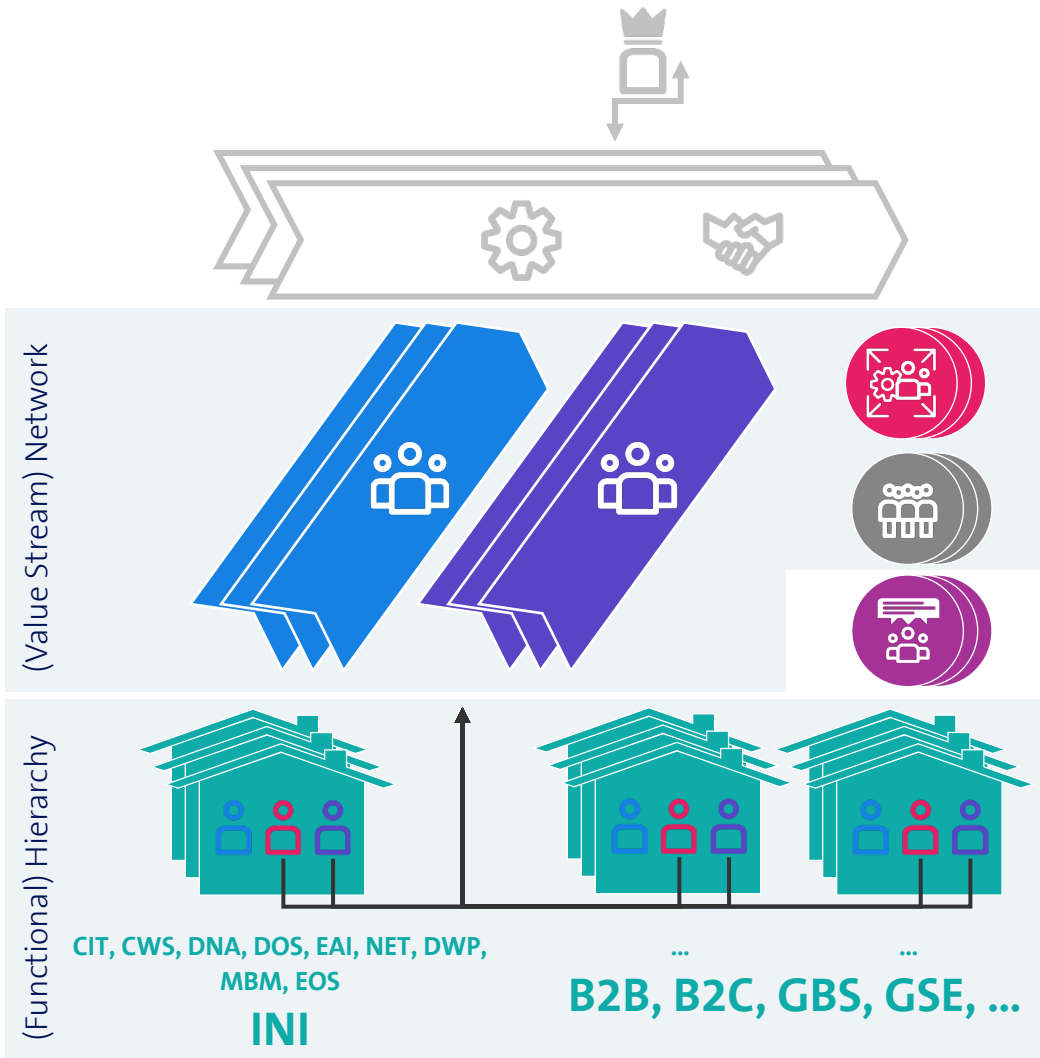


Overview: Structural Elements





(Functional) Hierarchy and (Value Stream) Network

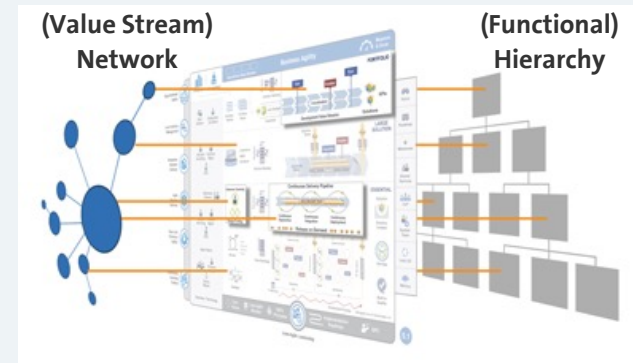


(Functional) Hierarchy

The (Functional) Hierarchy maps the employee-supervisor relationships.

(Value Stream) Network

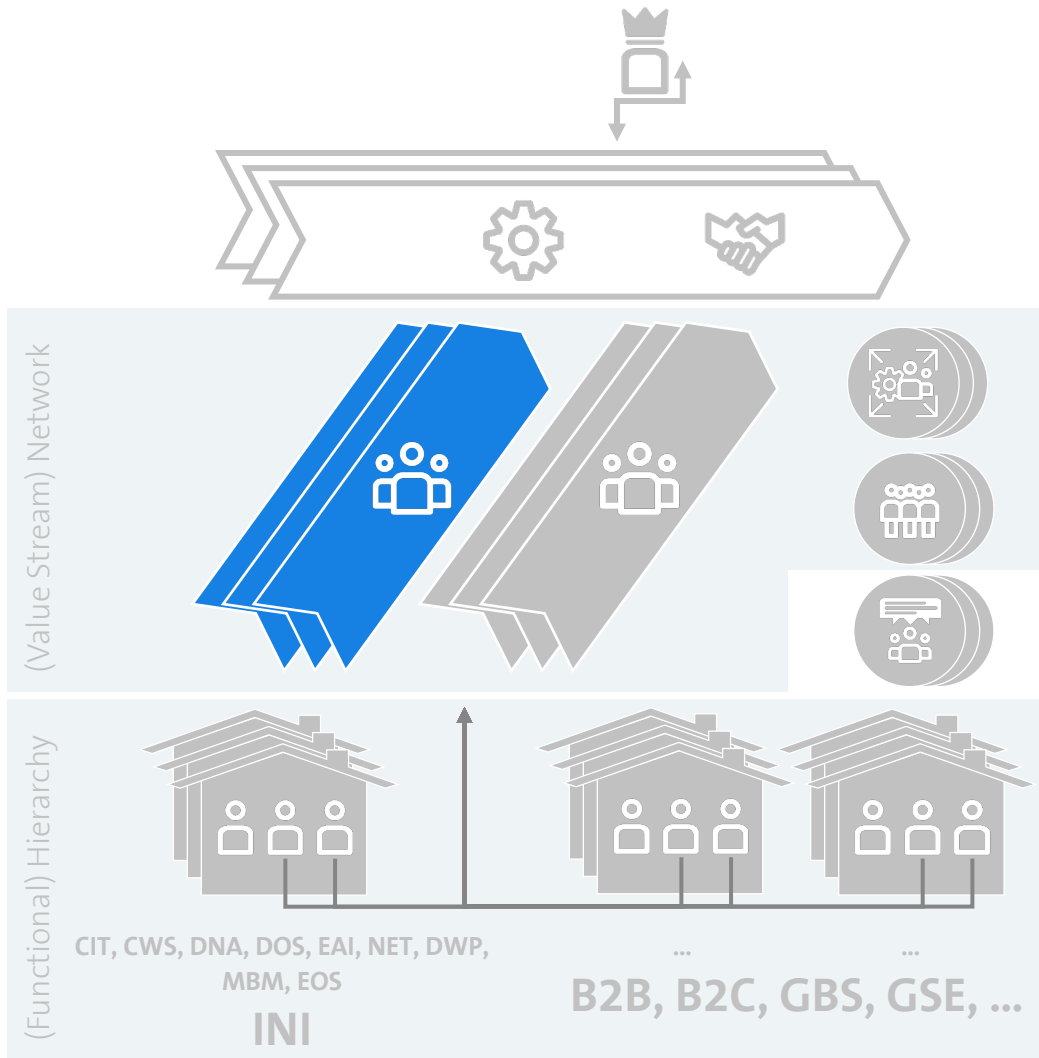
The Value Stream Network helps to form teams along the value creation.



Source: scaledagileframework.com



Development Value Streams (DVS)



A DVS is a BizDevOps product development organisation. The members of the DVS develop and operate solutions that are used by customers and OVS.

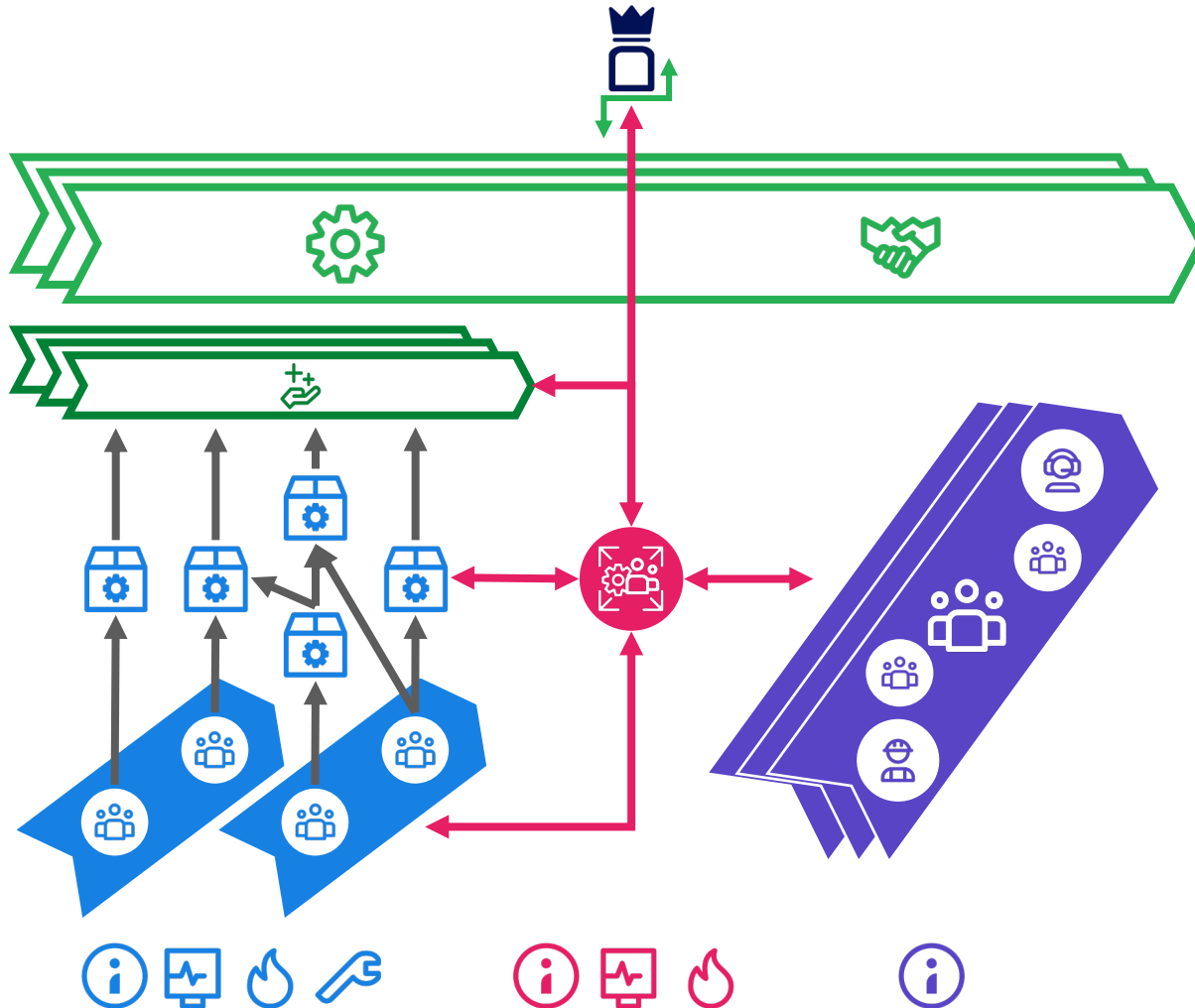
Each DVS actively solicits customer feedback to inform product development.

Each DVS is responsible for the entire lifecycle of its solutions, i.e. development, operation, profitability, phase-in and phase-out.



Big Picture Operations at NWoW

Decentralised Operations in the Value Stream Network



Important Tasks in Operations



Ability to provide information



Monitoring
Event management



Incident Response
Incident management



Testing + Release procedures
Change enablement, formerly Change management

Agile teams are responsible for development and operations: «you build it, you run it».



Resilience
Reliability is our most important feature!
Stability



DevOps

How to Create World-Class Agility, Reliability, & Security in Technology Organizations

« There is no tradeoff between improving performance and achieving higher levels of stability and quality. »

Nicole Forsgren, Jez Humble, Gene Kim

Accelerate The Science of Lean Software and DevOps:
Building and Scaling High Performing Technology
Organizations



class SRE implements DevOps

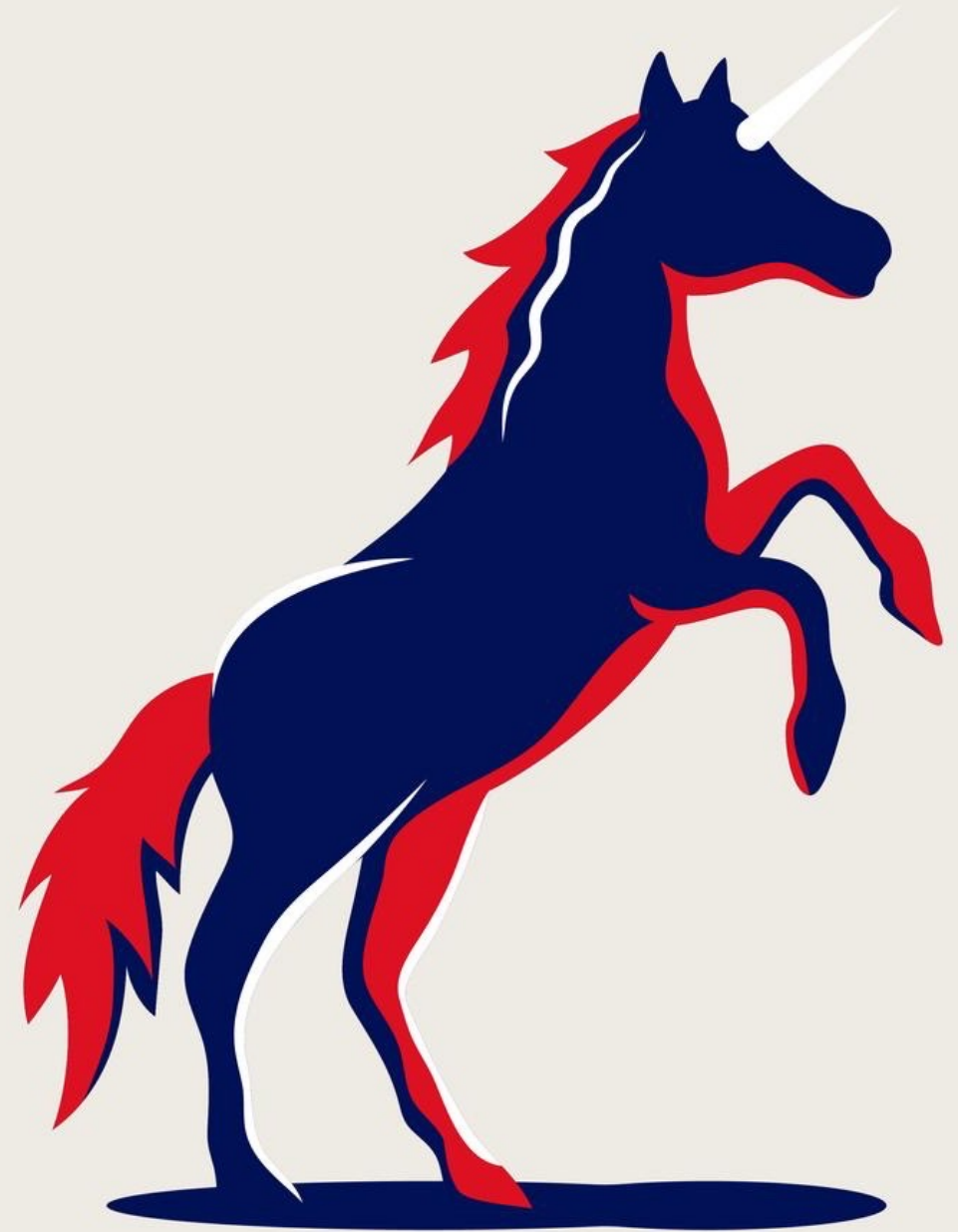
« Operations is a software problem. »

The Site Reliability Workbook



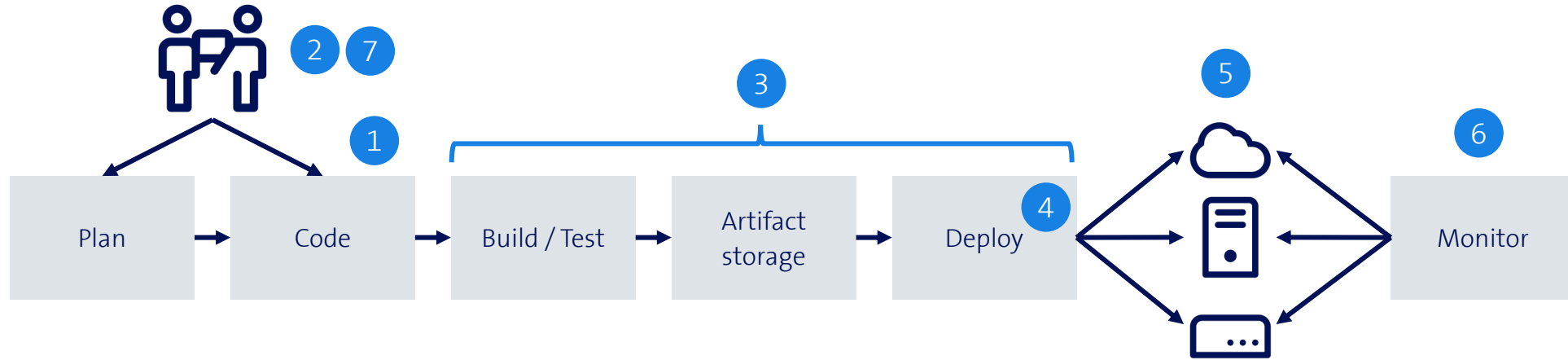
ITSM, ITIL, BizDevSecOps und SRE

- Technological developments in the last 10 years have led to fundamental changes in development and operations practices
- New practices from DevOps and SRE are now established as best practice in the industry
- Classic IT service management is no longer sufficient
- The operations at NWoW combines proven best practices
- Gradual transition to ITIL 4 and strong focus on DevOps and SRE practices
- Common principles, practices and tools form the basis for success in decentralized operations





Principles and Practices in the BizDevSecOps Cycle



1 Everything as Code

- All configuration and software MUST be kept as «code» in a version control System

2 Peer Reviews

- Changes to software and configuration MUST be checked according to the four-eyes principle by means of a pull request

3 Automate All the Things

- Changes MUST be verified using automated tests
- Changes MUST be deployed automatically to the target environment
- Changes to production environments MUST NOT be made manually

4 Gradual Deployment and Automated Rollback

- Changes MUST be deployed gradually to the target environment
- Changes MUST be reversible by means of an automated rollback

5 Test for Reliability (Chaos Engineering)

- Services MUST be tested for reliability on a regular basis

6 Monitor All the Things

- Services MUST have end-to-end monitoring from the customer's perspective
- Services MUST have Service Level Indicators (SLI) defined
- Services MUST have Service Level Objectives (SLO) defined

7 Eliminating Toil

- Teams MUST NOT have more than 50% «Toil»



NEU inklusive bei jedem inOne Home Abo
2 Tauben 117, und je eine 118 und 144



Politik will sich Swisscom vorknöpfen

«Das ist nur noch peinlich»

Die erneute Panne der Swisscom wird ein Nachspiel haben. Die Politik erhöht den Druck auf den halbstaatlichen Telekom-Konzern. Erste Zweifel an CEO Urs Schättli werden laut.

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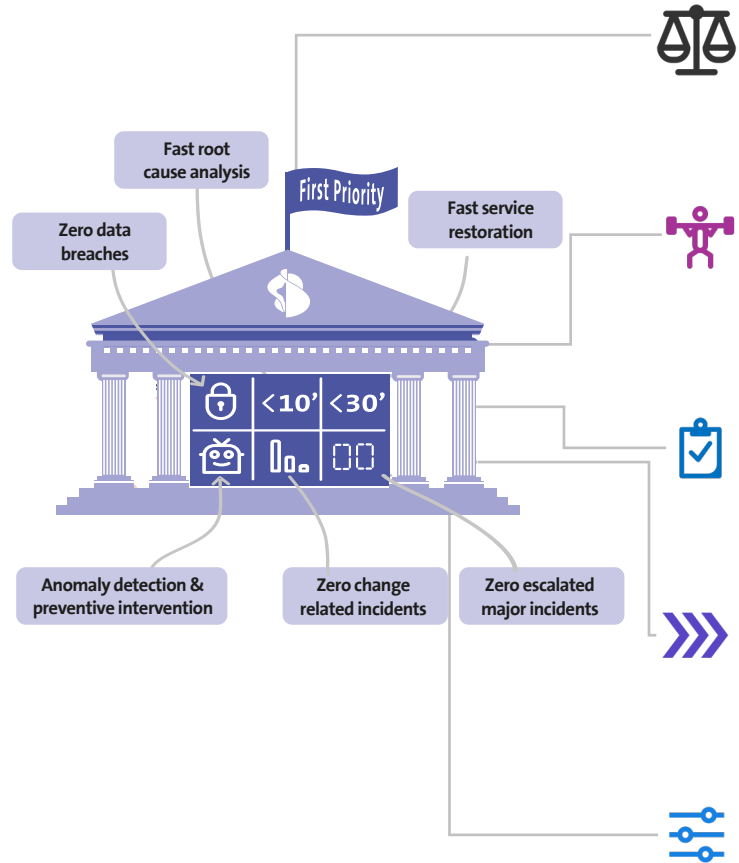
[84 Kommentare](#)





The IT Service Management System: Overview Elements

Key Results of the Service Mgmt. System



Elements of the Service Management System

Governance:

The Service Management Governance Directive mandates EOS to assess, direct and monitor the Service Management System and corresponds to the terms of ISO/IEC 20000 and ITIL 4.

Practices:

The existing service management processes have been updated to ITIL 4 compliant practices and enriched by nine additional practices to be able to successfully align with DevOps and SRE.

Requirements:

A set of non-functional Requirements for Service Management and Service Reliability.

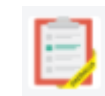
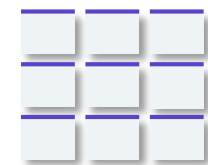
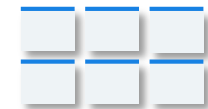
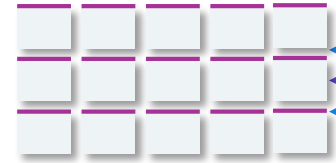
Reliability Enhancing Procedures [REP]:

Standard routines to improve the resilience and reliability of our services and resources. Procedures are Swisscom creations inspired by SRE best practices.

Service Management Assessment [SMA]:

Assessing compliance of a Service with the Service Management Requirements.

Deliverables / Relations



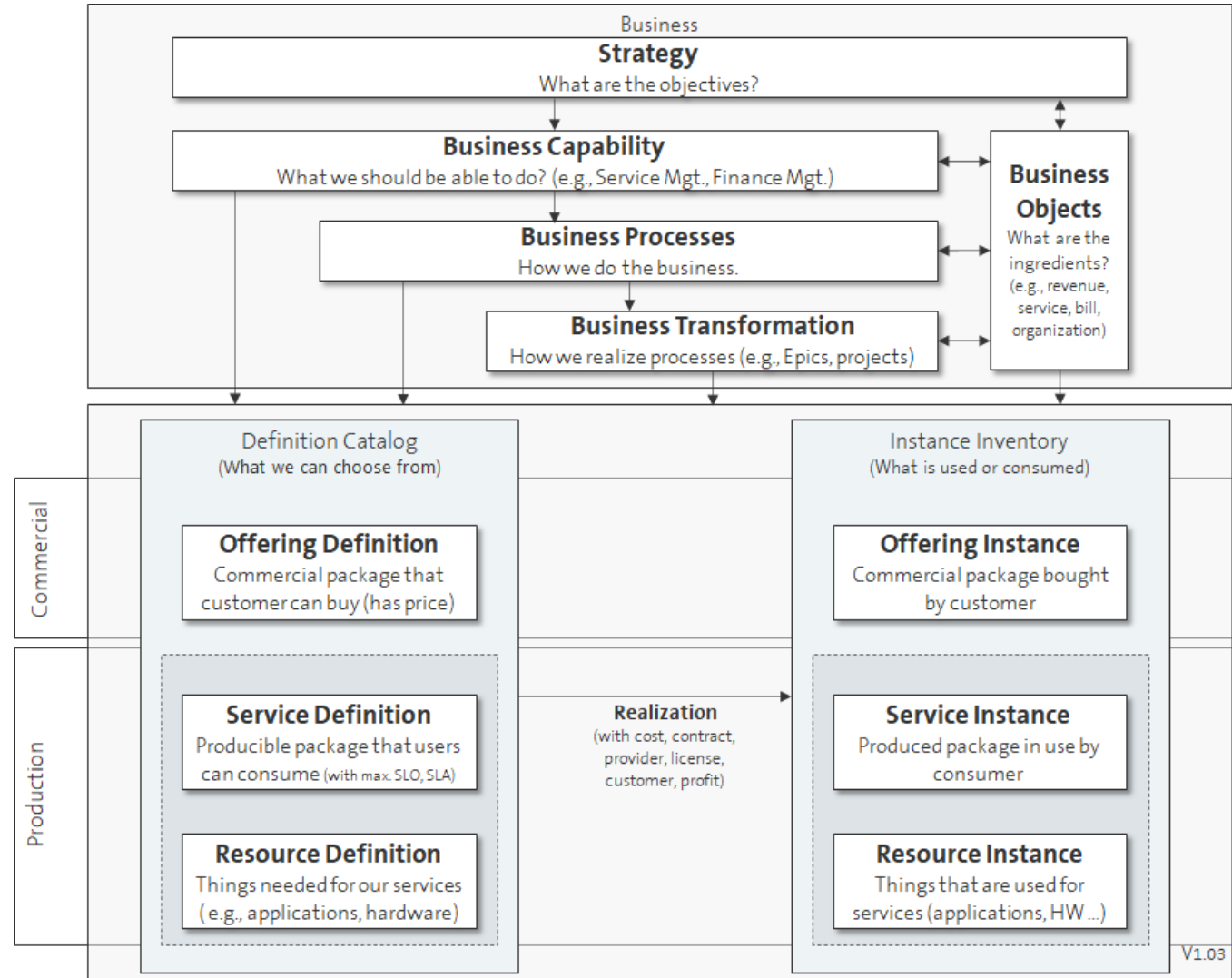
Defines Requirements on Practices

Improves Services

Assesses Services/Requirements on Practices



Enterprise Architecture

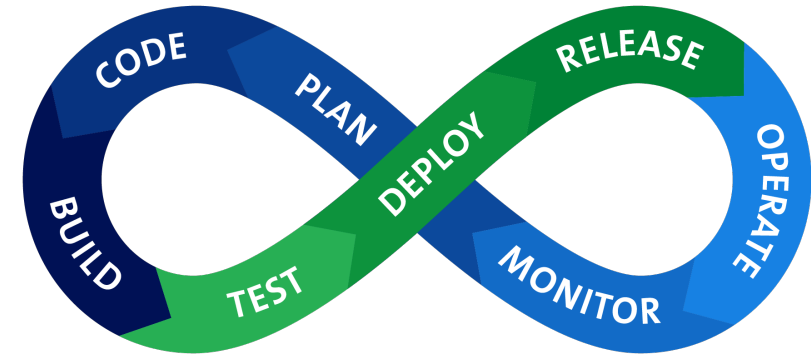
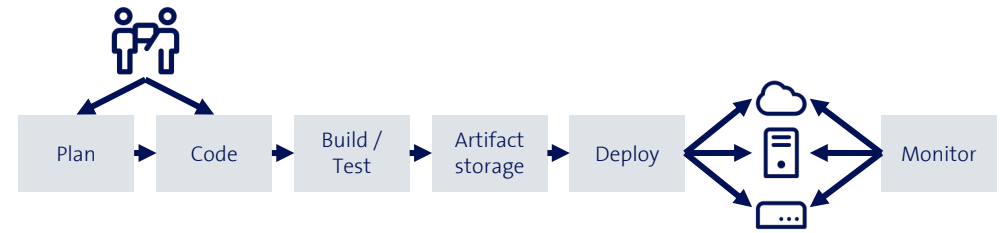




Accelerate Adoption of DevOps and SRE Practices with Standard DevSecOps & Platform Services

Standard DevSecOps & Platform Services, and automation in general, are a corner stone of DevOps and SRE practices.

Adoption of DevOps and SRE practices is accelerated, or even made possible, by providing standard DevSecOps & Platform Services to DevOps teams in Value Streams.





DevSecOps & Platform Services

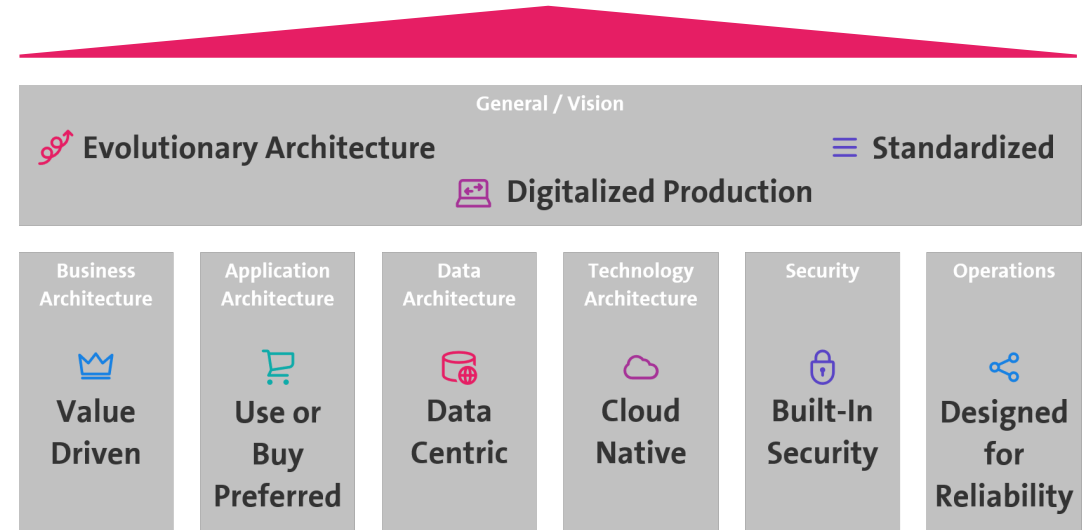
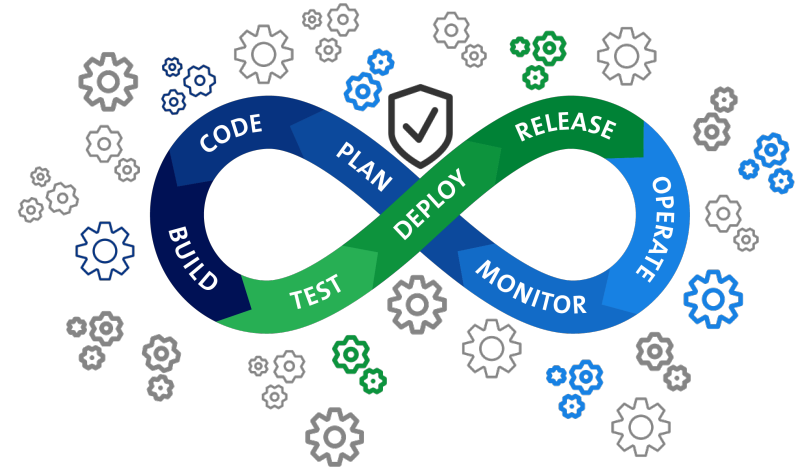
From Requirements to Standard Solutions

Working together with specialists from the various governance entities, we're implementing a portfolio of DevSecOps & Platform Services that provide standard solutions for NFRs as defined in the Enterprise Architecture Principles & Guardrails framework

Standard DevSecOps & Platform Services

- **ensure compliance with rules & regulations and internal standards**
- **are fully integrated into Swisscom's end-to-end processes**
- **are provided to Value Streams «as a service»**

Value Streams can adopt standard services DevSecOps & Platform Services instead of (re-)implementing custom solutions





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