



NTT DATA

**Digital Transformation (DX) &
Case Study of NTT DATA.**

**AGILE/
DEVOPS
GLOBAL
CONFERENCE**

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Agenda

- **Introduction**
- **DX Approach**
- **Case Study of Organizational Transformation.**
 - Background
 - Details of Initiatives
 - SAFe Implementation
 - Utilization of the latest technology (GCP)
- **Summary**
- **Q&A**

Saikat Dalui



SPC/RTE
NTT DATA Corporation

- Having more than 11 years of experience in MNC.
- Role Played – Sr. Sys Engineer, PMO, PM, ScrumMaster, Agile Coach, RTE.
- Certifications 30+ - SPC® PMP® PRINCE2 Agile® CSM® SASM® SDP® BigData & Hadoop® etc.
- Current Role – SPC, RTE in Digi_BeSTA (NTT DATA).

2. DX Approach

DX Challenges:

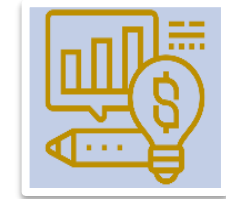
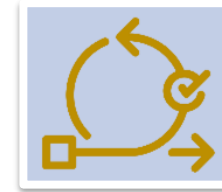
Strategy and Practice



Business Portfolio Transformation

- Degree of company suitability (Strengths of the company/Social issues)

It is essential to review investment areas based on the use of digital technology.



Continuous DX Practice

An icon showing a grid of 15 blue human figures, representing a team or organization.

It is essential that DX does not stop at PoC, there is a mechanism for continuous implementation.



Seven Scenarios for Solving Business Problems:

Solve the client's DX-related management issues through the representative scenario..



Organizational transformation contributes to DX

Structure, organizational management, and agile management to continue to provide value to customers continuously and speedily



Business Model Transformation

Consider a new business model



Data Driven Management

Realization of real-time management and digital marketing



New Value Creation

To add value to existing products and services or to create new products and services



Digital HR development & internalization

Training, reskilling and hiring of DX personnel
Maintain the motivation of DX personnel



Keeping up with the latest technology

Improving productivity through business efficiency
Quickly adapt to social changes

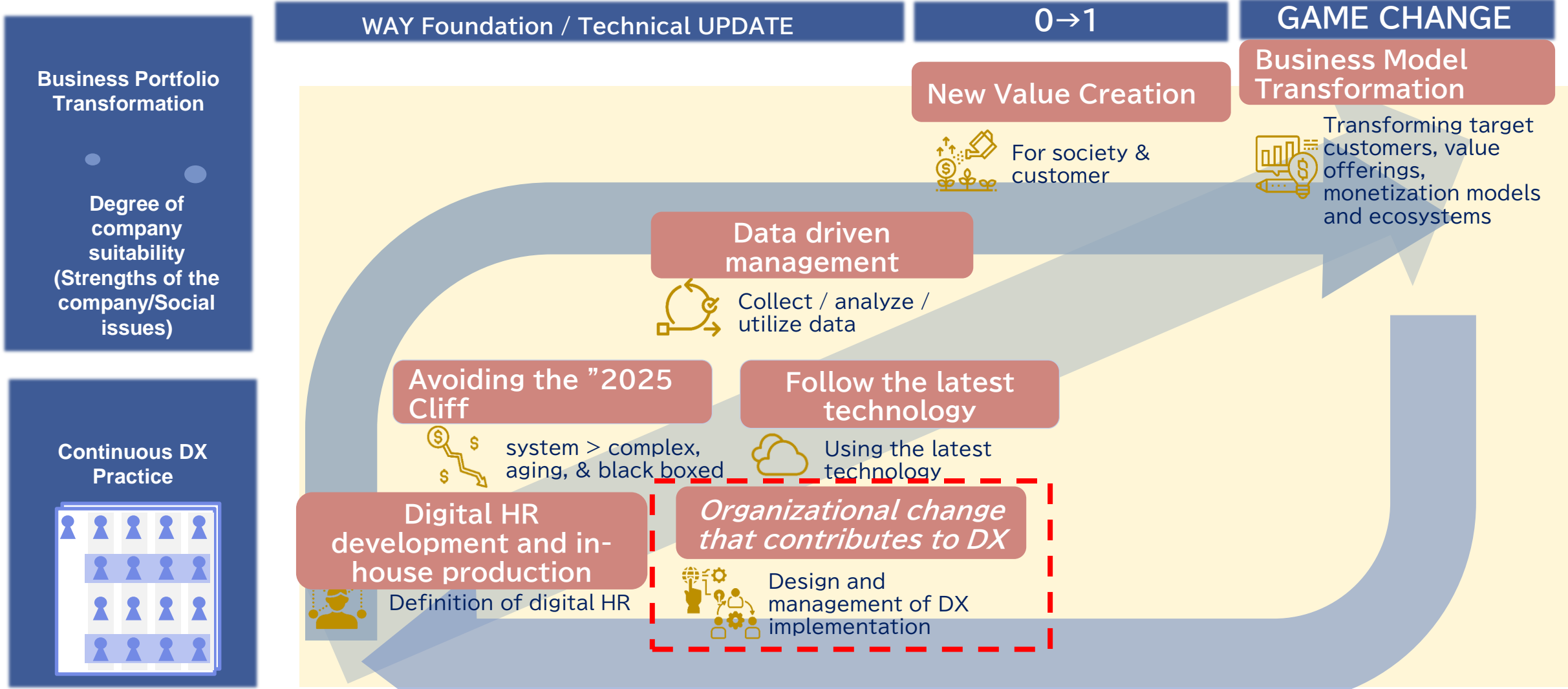


"Avoiding the "2025 Cliff"

Reduce the cost and avoid the risk of future operation.

Examples of developments in 7 representative scenarios:

Development of digital HR / Keeping up latest technology / Data-driven management / New value creation / Business model reform



Business Portfolio Transformation

Degree of company suitability (Strengths of the company/Social issues)

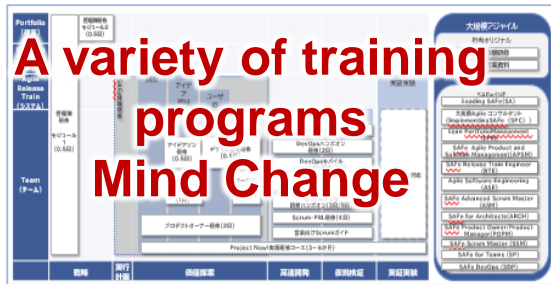
Continuous DX Practice

Necessary Elements for DX:

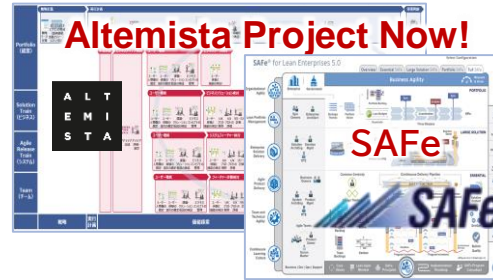
Transformation is necessary in the following six elements (KSF)



Mind-set



Process

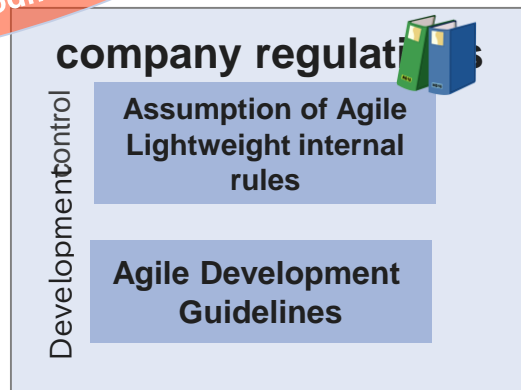


Tools

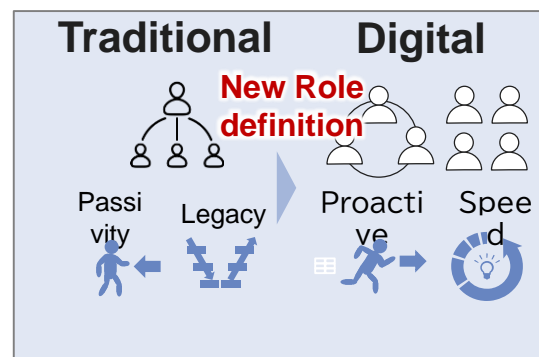


Rules

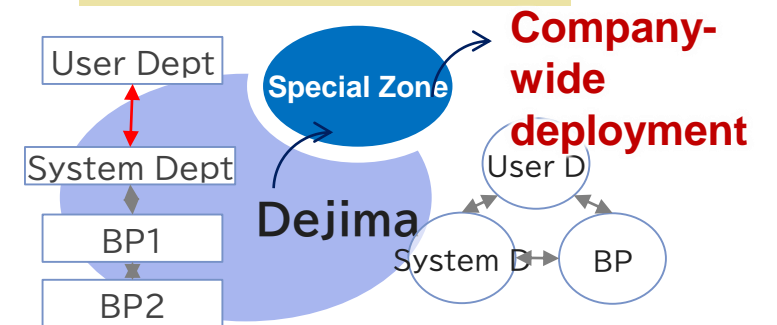
Additions/modifications



Role



Governance



(PO/SM/Dev/SRE/RTE,...)

3. Case Study of Organizational Transformation.

a. *Background*

b. Details of Initiatives

SAFe Implementation

Utilization of the latest technology (GCP)

Background of the customer:

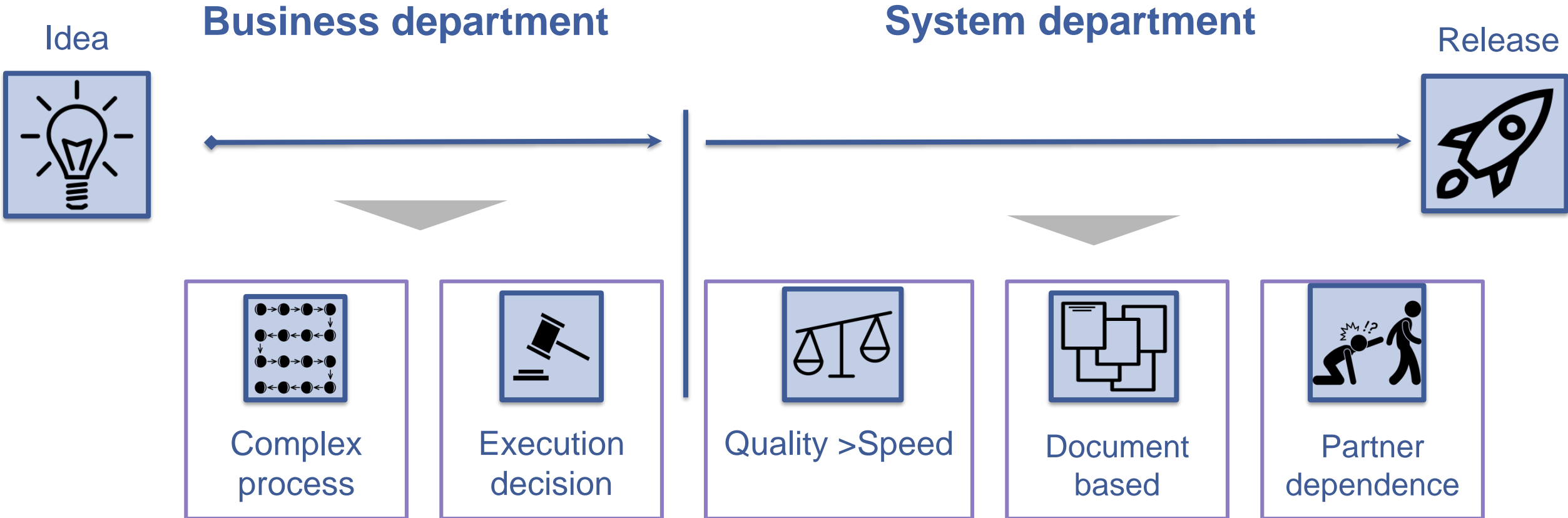


Current situation
and difficulties



Resolution &
Growth

Lack of speed throughout the business:



New Project:

- Agility Projects for business development
- Development of valuable services (realization of Payment as a Service)

Process



Risk Management



Team



Architecture



Platform

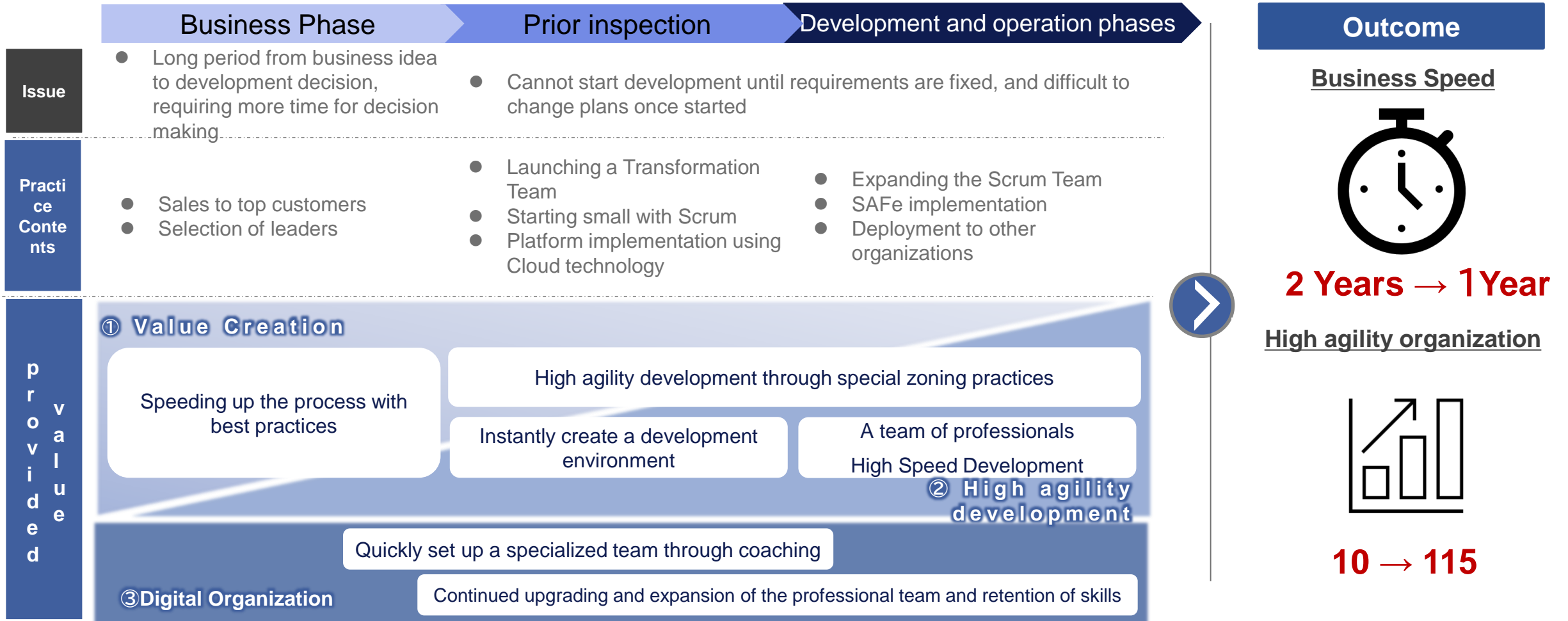


Development Method



Application Results:

NTT Data's solutions are used to **SPEED UP the business (2 years ⇒ 1 year)**



3. Case Study of Organizational Transformation.

a. Background

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Organizational Change Schedule (overview):

3 phases to achieve a new organization with agility.

Today's Scope



1. Grand Design:

Create a transformation roadmap

Grand
Design

Preparing for Scale

Start
SAFe



Roadmap to
Implement
SAFe



Idea creation /
Agile
development



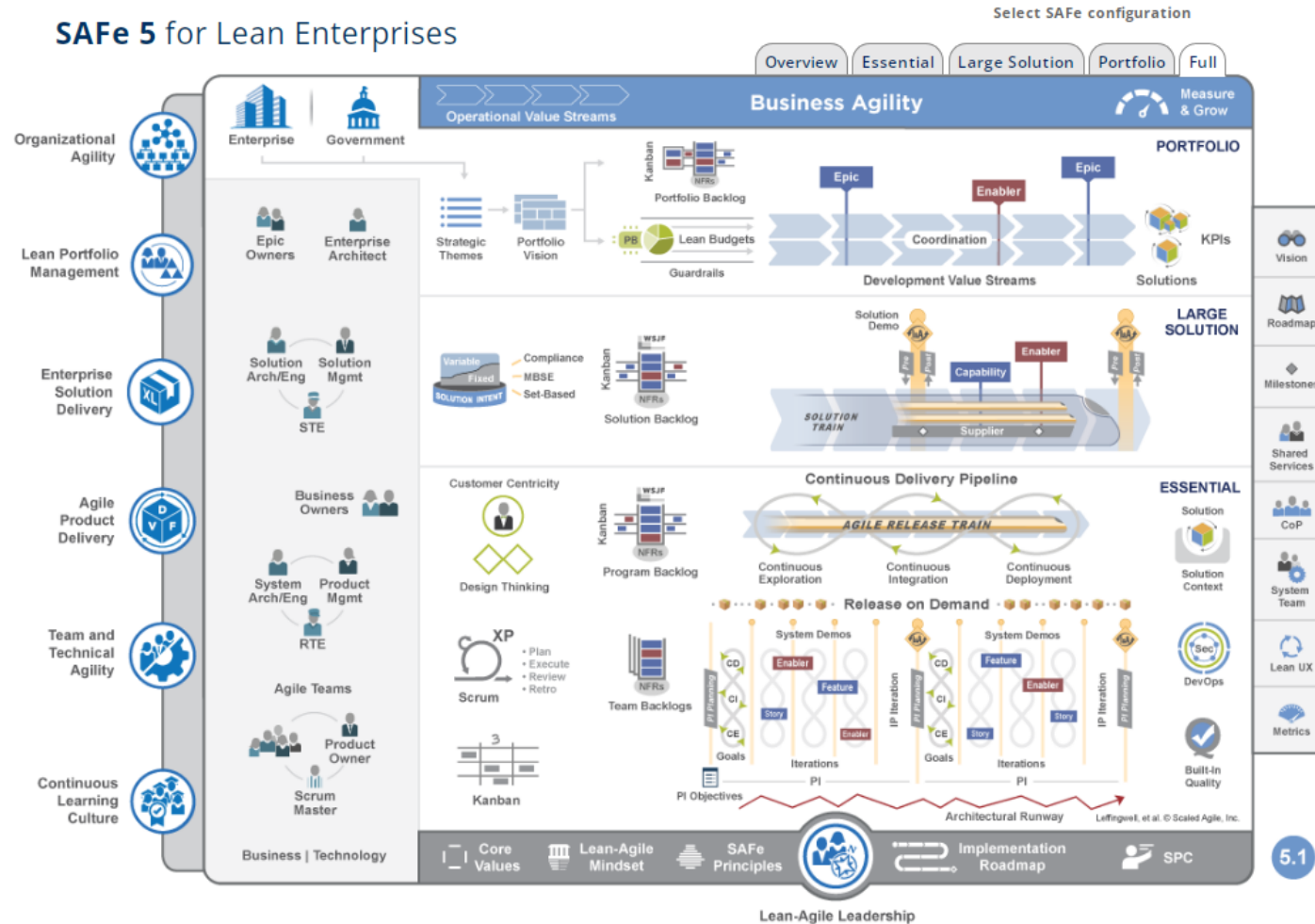
Digital platform



Agile guidelines

SAFe (Scaled Agile Framework):

Large-scale Agile framework :



Problems to be solved by Agile and SAFe:

Clearing the obstacles to achieving the goal, rather than focusing on SAFe

Analysis of issues to promote process reform

Direction of problem solving

Why

Why do we need SAFe?

A group of issues from the field perspective

- The need for a common language
- Fostering a culture of independent thinking
- Need for a team with skills

How

How do I implement this?

- Image of Organizational Reform
- Image of organizational integration
- Measures against organizational silos

What

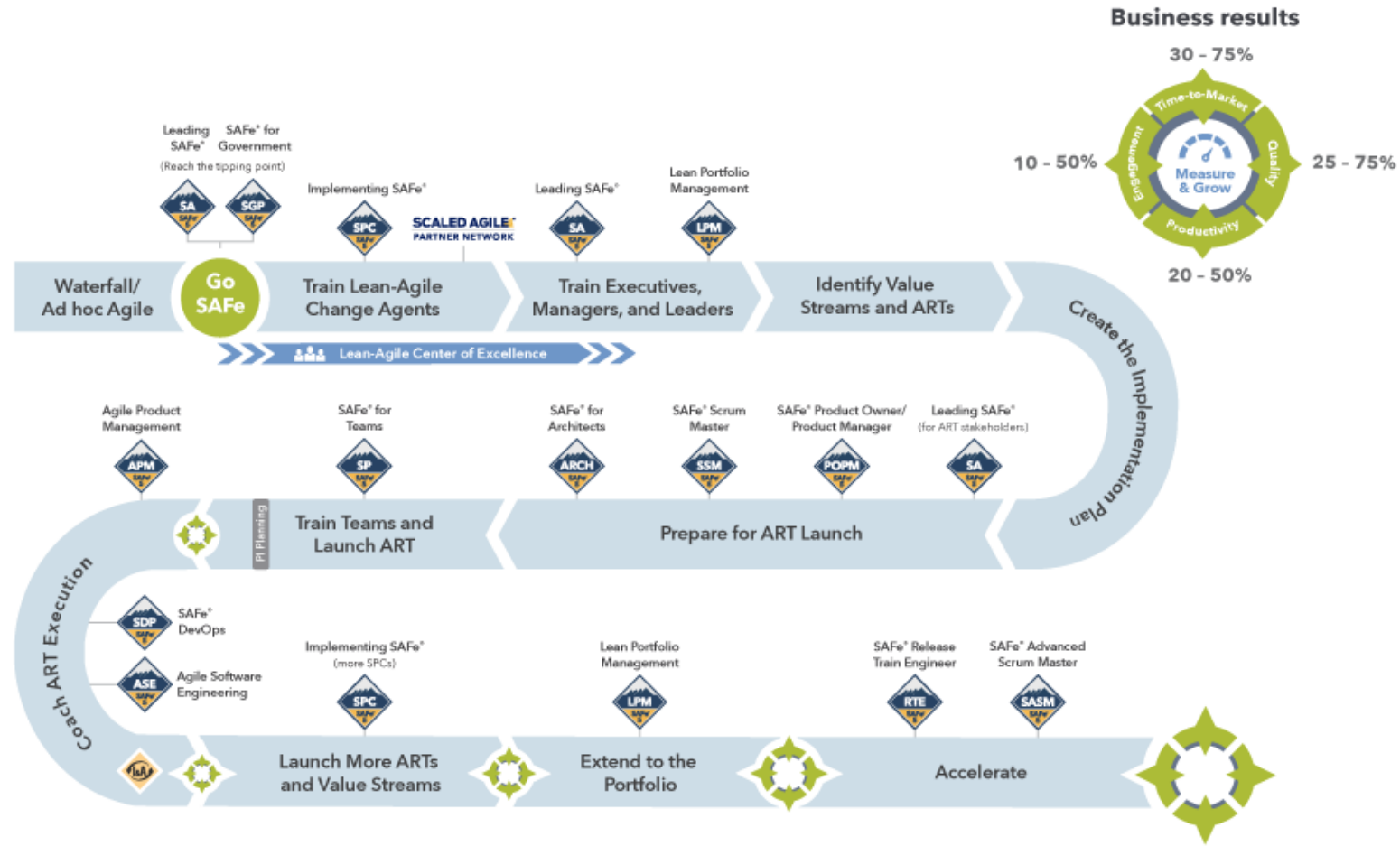
Can you explain what you would have to change to achieve rapidity?

- The service development method of "making it small and getting it to market fast"
- The risk of re-inventing the wheel blindly

- ① **Understanding of new values**
- ② **How to promote across multiple departments**
- ③ **Fostering a common understanding of the solutions**

The first thing to do:

Implementation Roadmap recommends training change agents and creating a LACE team



What's LACE (Lean-Agile Center of Excellence):

LACE is an agile team that works across the organization with a company-wide perspective to implement the transformation roadmap. All members are change agents.

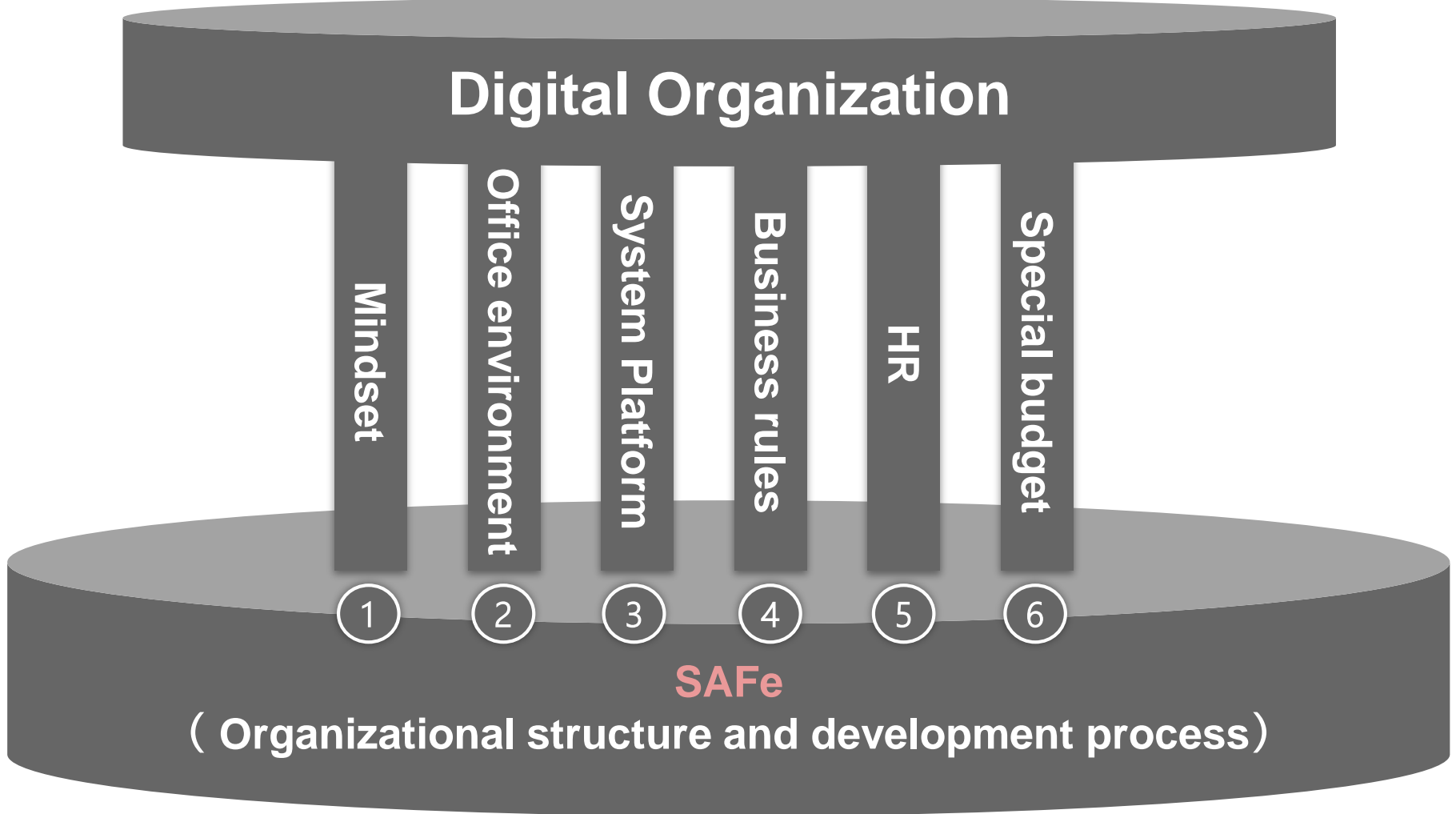
Mission

- Maintain a transformation strategy and roadmap
- Build business process and rules to adapt to change
- Lead the organization to Lean-Agile mindset
- Define and launch teams based on value streams



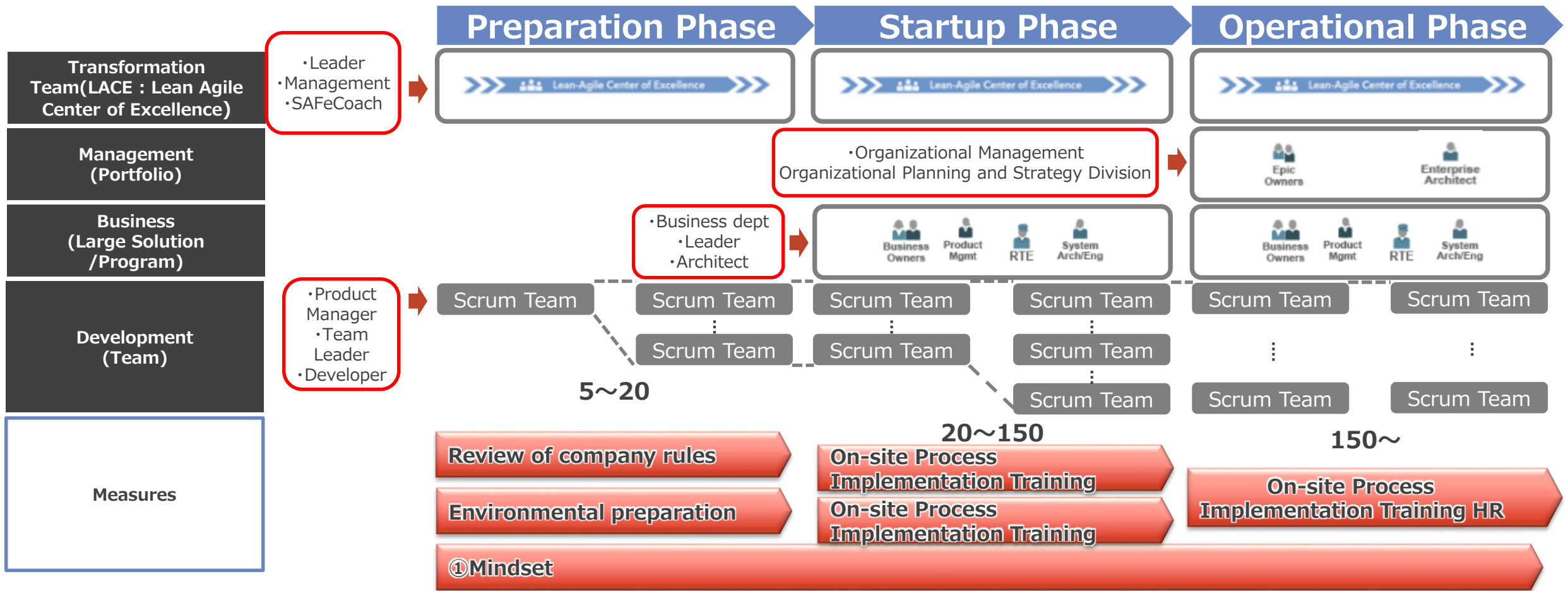
NTTD Original 6 KSFs (Key Success Factor):

6 KSFs based on SAFe and experience in the Project.



Fostering a common understanding of issues and solutions:

Visualize what you are planning to expand



How to promote solutions across multiple departments:

The LACE team was formed with the key persons from each department, and ToBe image was shared, leading to discussions on how to utilize it.

Mission of the Transformation Team

1. Build systems and structures to cope with change
2. Mind transformation of organizations and people to lean and agile
3. Develop a transformation roadmap and provide overall support and improvement activities for implementation

ToBe
Image
Discussion

Changes in communication

- Schedule to fit each small business requirement
- Business unit members discuss IT team size in initial review

Etc.

3. Case Study of Organizational Transformation.

a. Background

b. Details of Initiatives

SAFe Implementation

Utilization of the latest technology (GCP)

2. Grand Design:

Create a transformation roadmap



Roadmap to Implement SAFe

Idea creation / Agile development

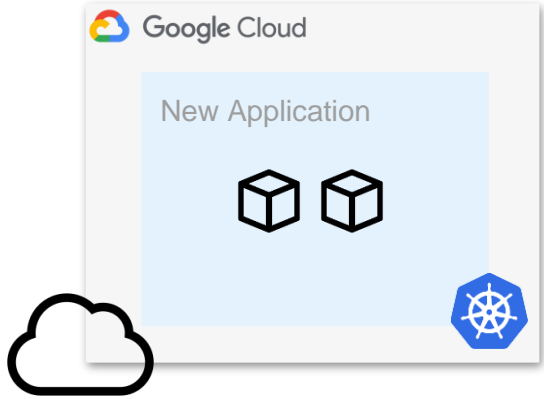
Digital platform

Agile guidelines

Digital Platform's Goals:

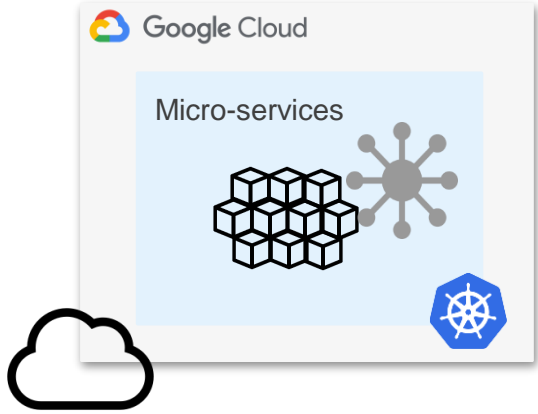
Cloud Native Platform to Support Customer's Digital Business Design what it should be from the ground up, without being bound by existing assets

2020



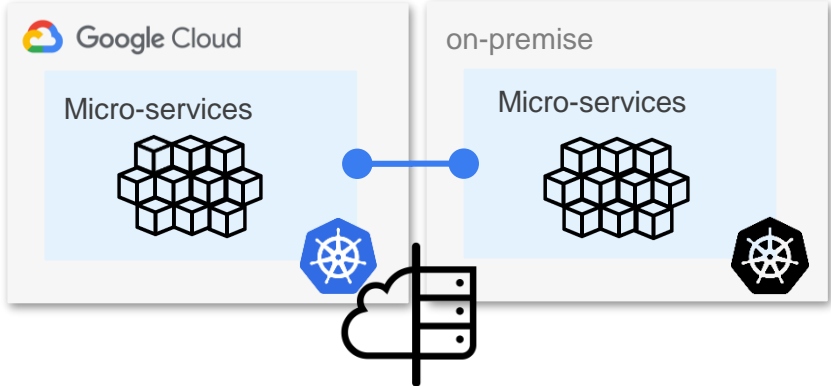
- Starting Small on the Public Cloud
- Started service development using Lean methodology in a pilot project to achieve large-scale Agile.

2021



- Expanding services on the public cloud.
- Start Large Scale Agile. Introduce micro-services to increase agility by dividing services into smaller units.

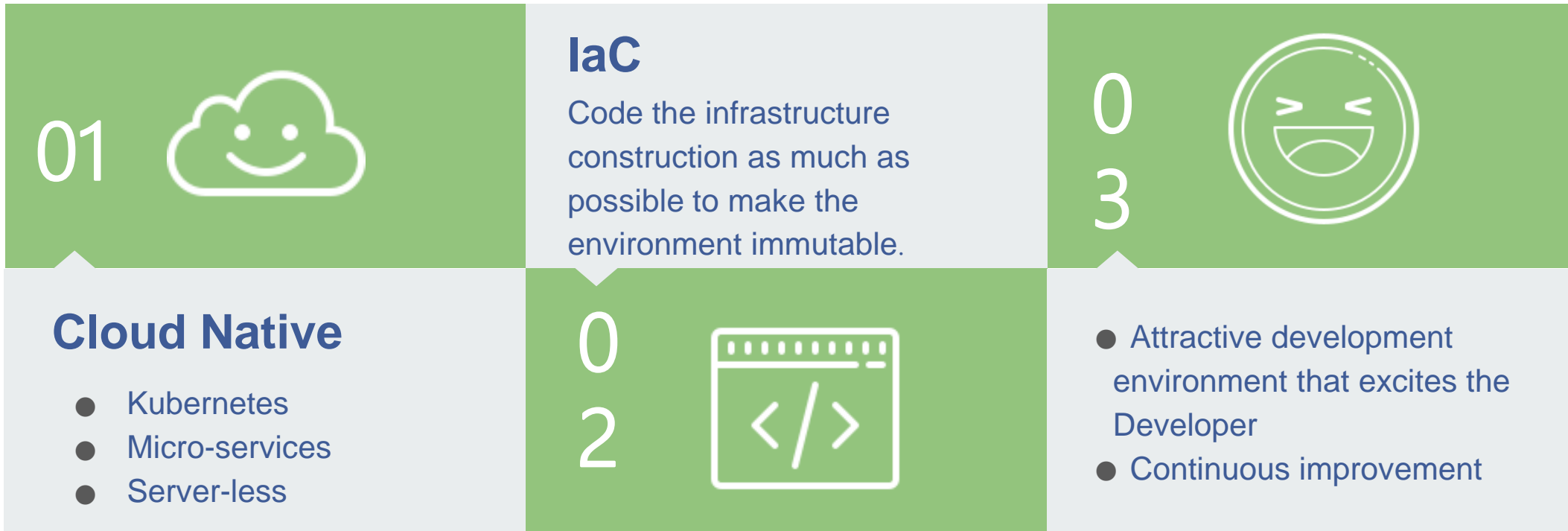
2023



- Hybrid Cloud
- Integration with existing IT systems
- Realize a platform that enables agility development regardless of environment

Digital PF Basic Policy (1):

- The four elements of Cloud Native
- (Agility, Observability, Resilience, Scalability)



Digital PF Basic Policy (2):

- The policy for product selection is to consider Hybrid/Multi Cloud.
- In addition, we will actively utilize managed services to prevent operational costs from increasing as services expand.
- Proactively utilize managed services to prevent operational costs from increasing as services expand.



Digital Platform:

We will now describe the actual platform that we built in the second phase.



Platform Architecture Reform:

Implement a platform that fully utilizes cloud technology with a clear objective of visualization and automation.

Objectives of using the cloud

Visualization

Visualizing on-site numerical data for continuous improvement activities



Automation

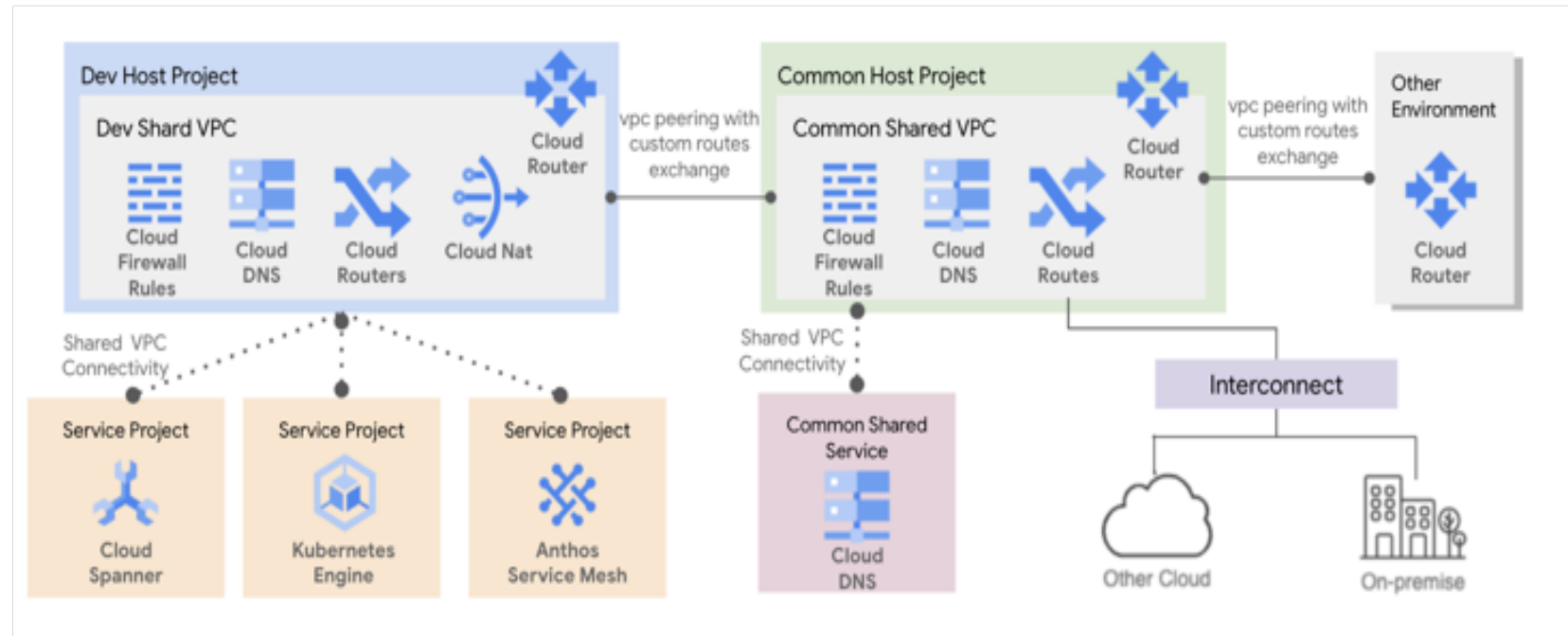
Automate routine tasks as a mechanism for organizational management by fully utilizing cloud technology



Reduce Platform Operation Load:

Centralized management of networks, which tend to be complex, reduces the burden of environment construction and operation.

- ✓ Uses GCP's virtual network control service called SharedVPC
- ✓ Centralized management of networks in the cloud is possible by using a hub configuration.

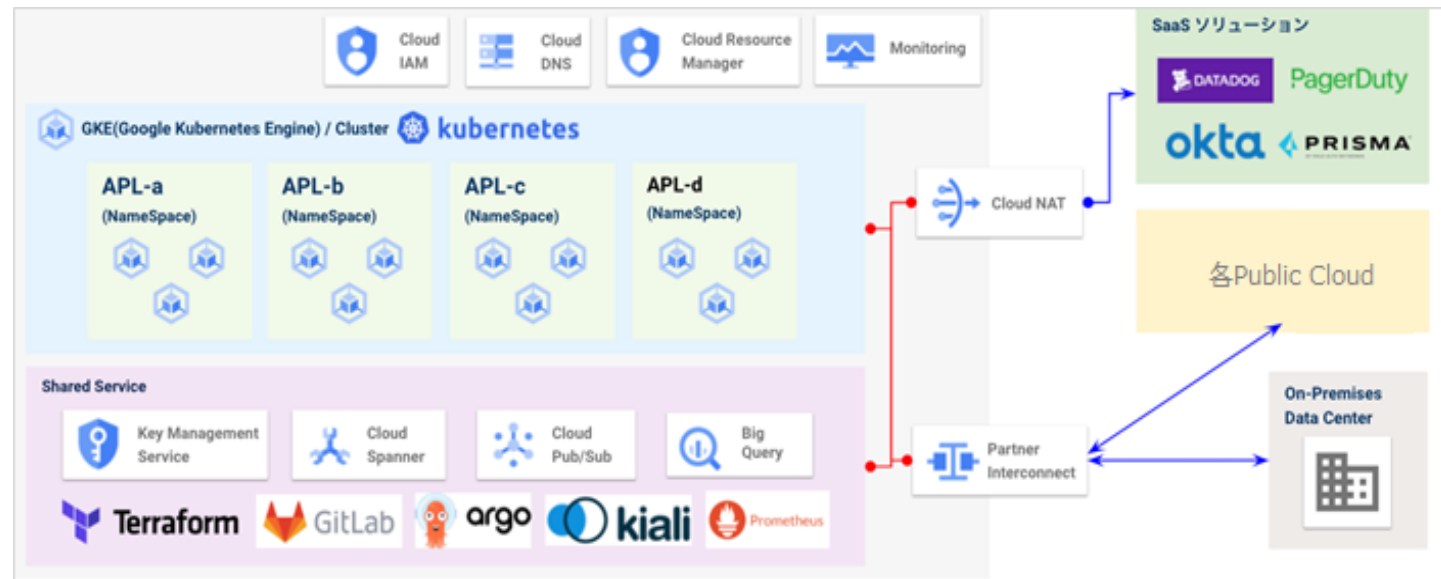


GCP System configuration

Cloud Cost Optimization:

Optimize cloud costs by managing resources on GCP as a multi-tenant cluster to keep up with changes in team composition and strategy.

- ✓ Deployment of multi-tenant GKE clusters and ASM GCP services
- ✓ Centralized management of multiple services by consolidating them as a single cluster
- ✓ Optimize cloud operating costs according to team composition and strategy

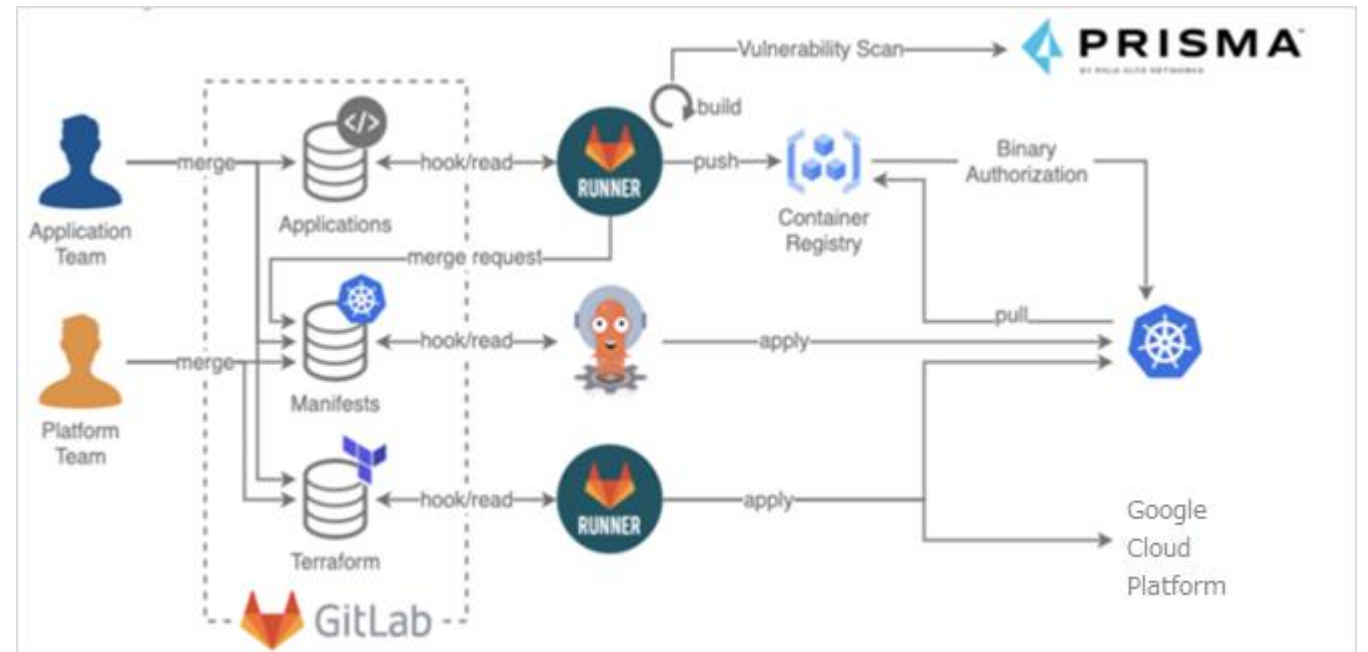


Multi-tenant system configuration

Reasonable Security Assurance:

Implementing the DevSecOps system to ensure security without strain.

- ✓ Build a CI/CD Pipeline to Automate Routine Tasks
- ✓ Incorporate Prisma Cloud vulnerability scanning into the pipeline
- ✓ Ensure security through DevSecOps mechanism that automatically executes the pipeline on a daily basis



CI/CD pipeline configuration using PRISMA

Continuous improvement of services provided:

By visualizing and sharing the status of maintenance operations, not only managers but also other can realize an environment where improvement proposals can be made

- ✓ Set service levels based on GCP usage and visualize them on a dashboard
- ✓ Implemented a system to not only monitor but also report failures with Datadog and PagerDuty

4. Summary

Summary

- ✓ DX Challenges
- ✓ How Seven Scenarios Solve Business Problems
- ✓ Clarify business / business issues and objectives
- ✓ Necessary Elements/Toolkits for DX
- ✓ SAFe & GCP methodology and technology can be the key to reform

Thank You Very Much !

ありがとうございました !

Q&A

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THANK YOU

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