How testing is evolving in DevOps…

…and how shall you evolve yourself

Szilard Szell
DevOps Transformation Lead
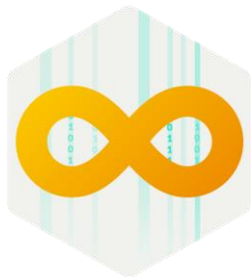
szilard.szell@eficode.com

Agenda

- Intro

- DevOps, the 3 ways and how Testing fits

- How testing is evolving in DevOps and how should you
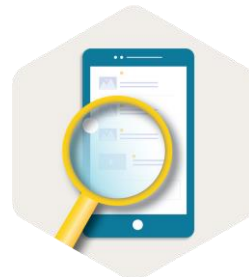
- Sum it up

Introduction

Who we are? Who I am?

Eficode expertise

DevOps and cloud transformation

Eficode ROOT DevOps platform

Digital services development

Atlassian solutions

Szilard Szell - in a nutshell

- Transformation lead at Eficode

- Long 19 years in NOKIA

- LEGO and Certification collector

- Voluntary in Hungarian Testing Board

- Voluntary in ISTQB

- PC member of Conferences – UCAAT, HUSTEF, and EuroSTAR2021

- Proud father of a 12 years old teenager

What Testing in DevOps means for you?

The Chronic Conflict

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Incentivised for change

Incentivised for stability

Dev

Wall Of Confusion

Ops
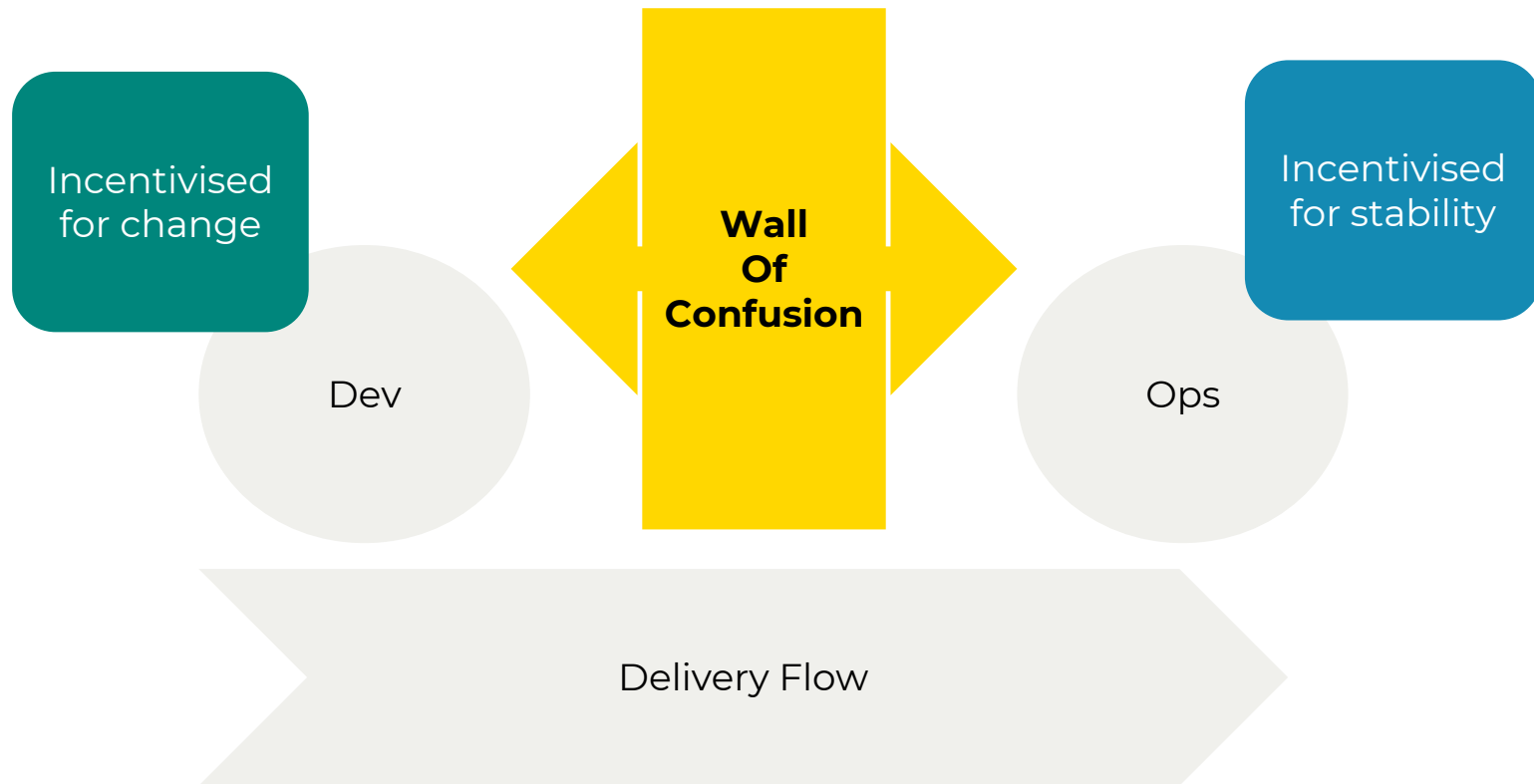
Delivery Flow

DevOps

Delivery Flow
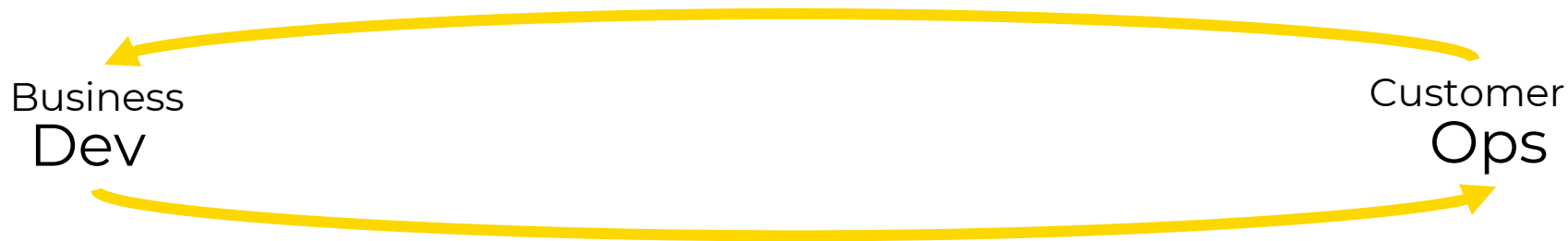
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Dev*Ops

QA?

Business?

InfoSec

Management?

Delivery Flow

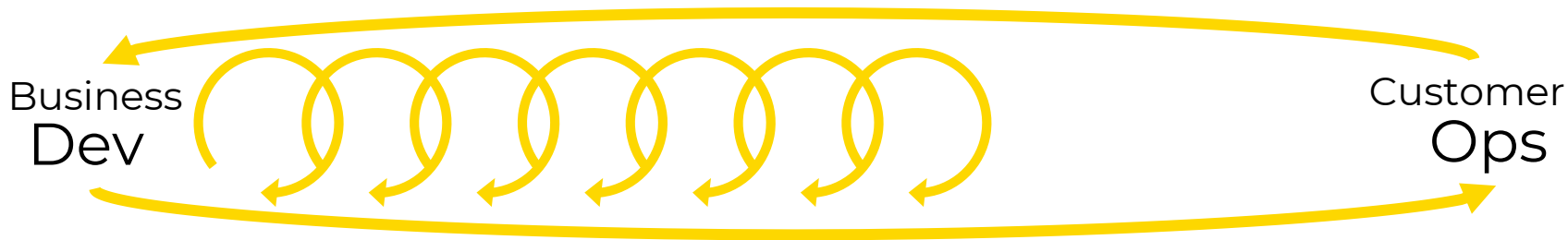# 1. The First Way: The Principles of Flow

Business
Dev

Customer
Ops

2. The Second Way: The Principles of Feedback

Business
Dev

Customer
Ops

3. The Third Way: The Principles of Continual Learning and Experimentation

Business
Dev

Customer
Ops

One DevOps view

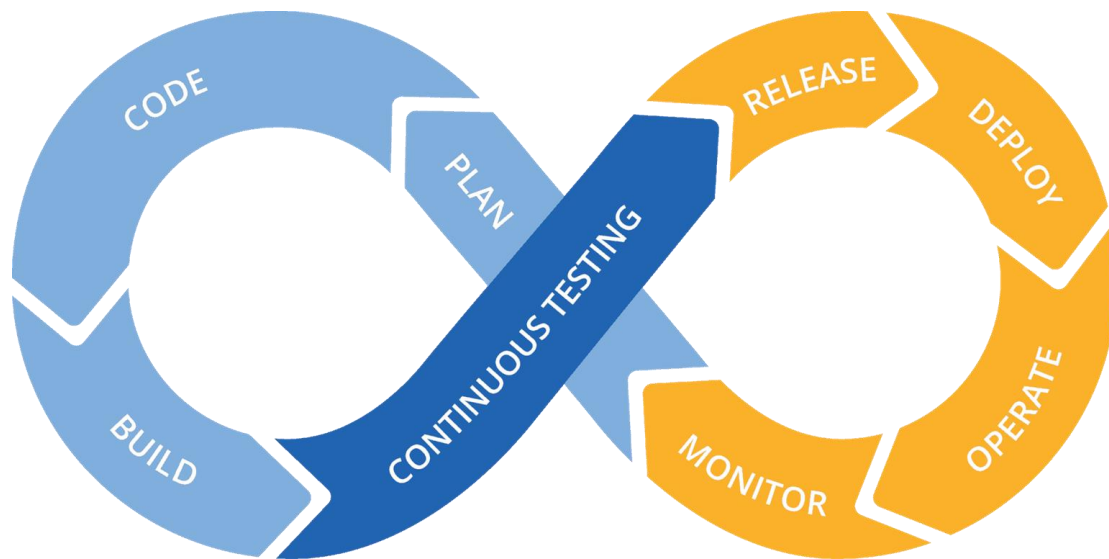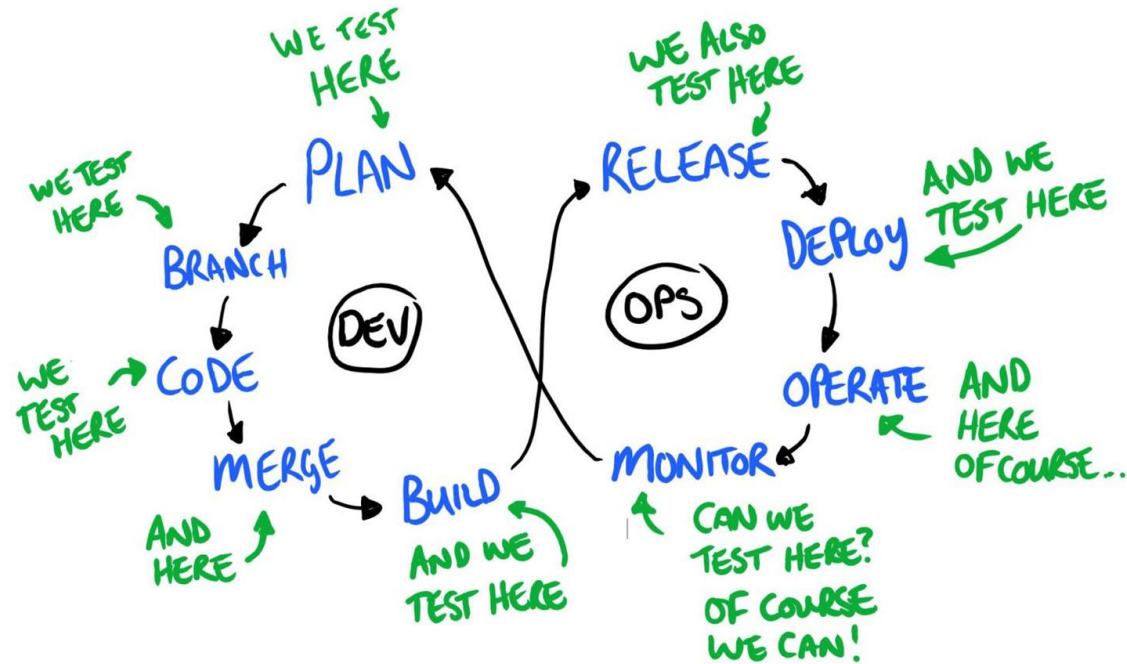Image source: https://www.tricentis.com/products/what-is-continuous-testing/

My favorite DevOps view

Testing in DevOps

Or shall we say Quality Assistance?

The development value stream

Plan Code Build Test Deploy Release Operate Monitor

Testing in the value stream

Plan | Code | Build | Test | Deploy | Release | Operate | Monitor

← Shift Left

Shift Right →

Test

Plan	Code	Build	Test	Deploy	Release	Operate	Monitor

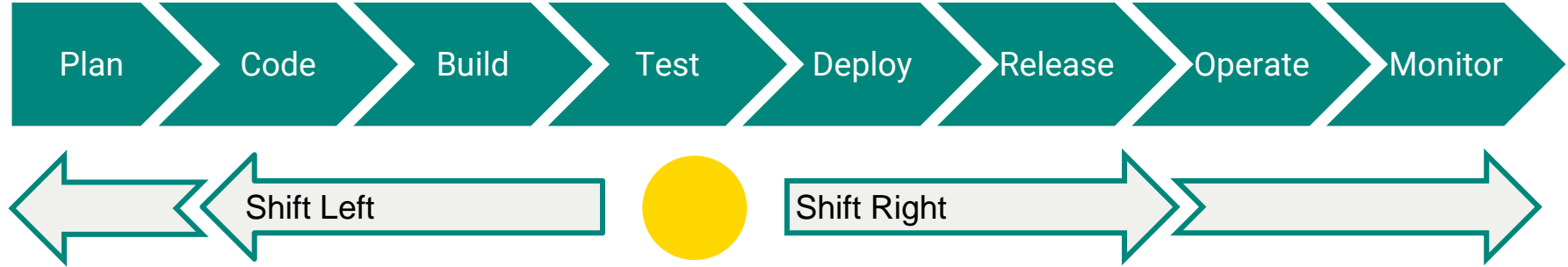Shift Left
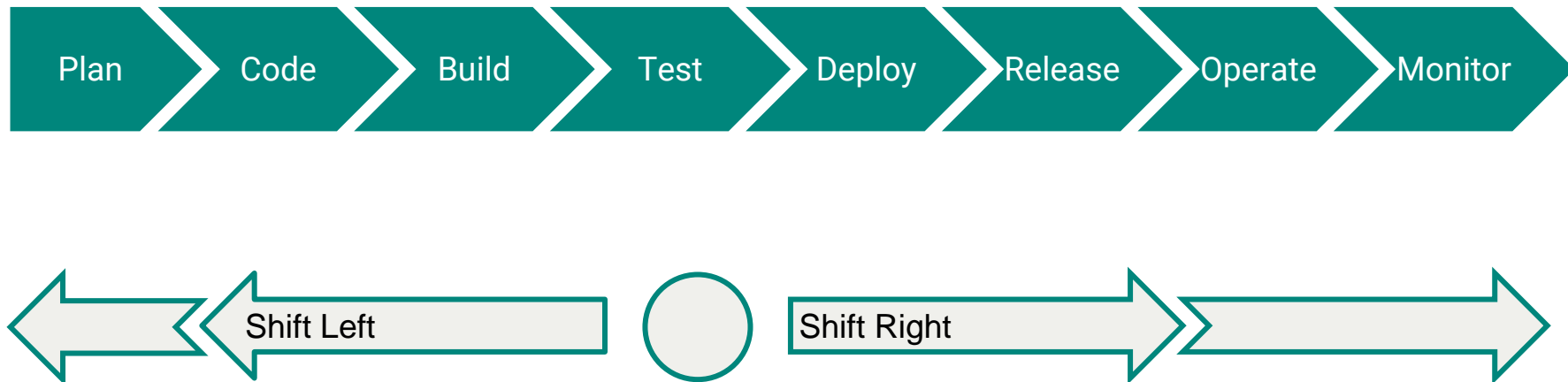
Shift Right

Continuous Testing

Keyword Driven Test Automation

Exploratory Testing and Bug hunting

Continuous Non-functional testing

Continuous Non-functional testing

ility (English)

Origin & history

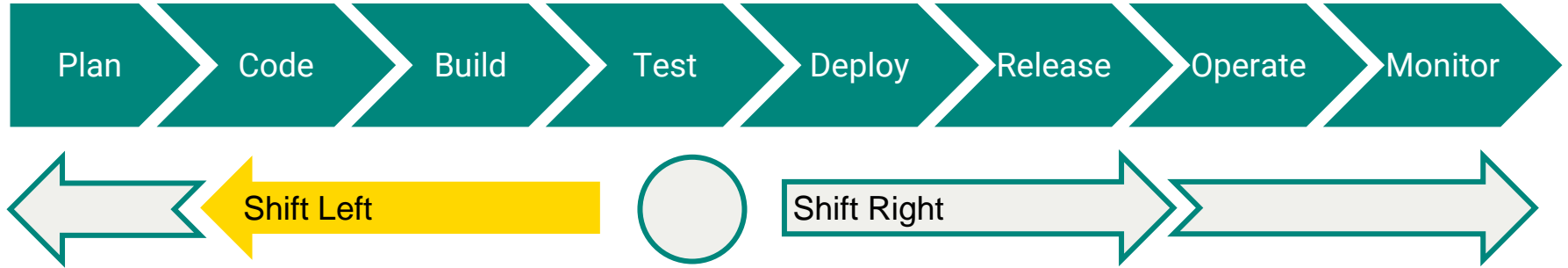From the common suffix of various desirable qualities, e.g. *testability*, *reliability*.

Noun

ility (*pl.* **ilities**)
1. (*computing*) An abstract quality that good software should exhibit.

Observability

QA during coding

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Plan	Code	Build	Test	Deploy	Release	Operate	Monitor

← Shift Left

Shift Right →

CI/CD pipeline design

TDD/Unit Testing

Code Analysis/Lint

Static Application Security Testing (SAST)

Designing a CI/CD pipeline
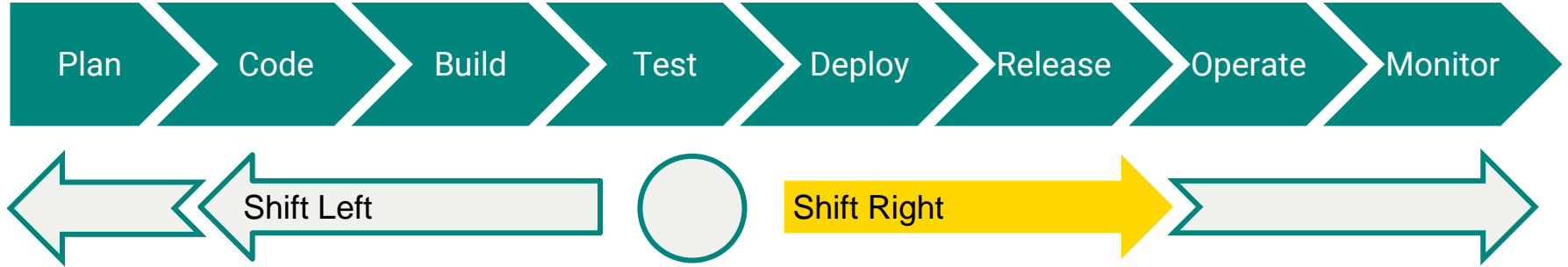
QA in deployment

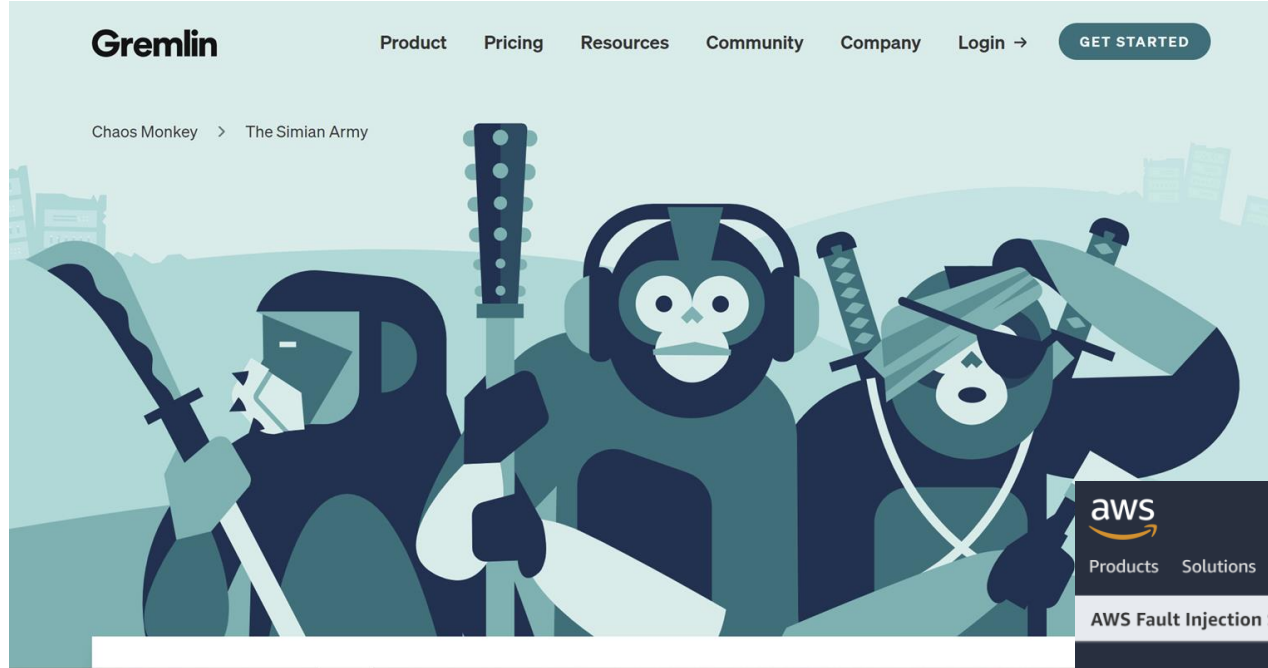
Deployment automation

Acceptance Test on standardized Staging

Chaos Engineering

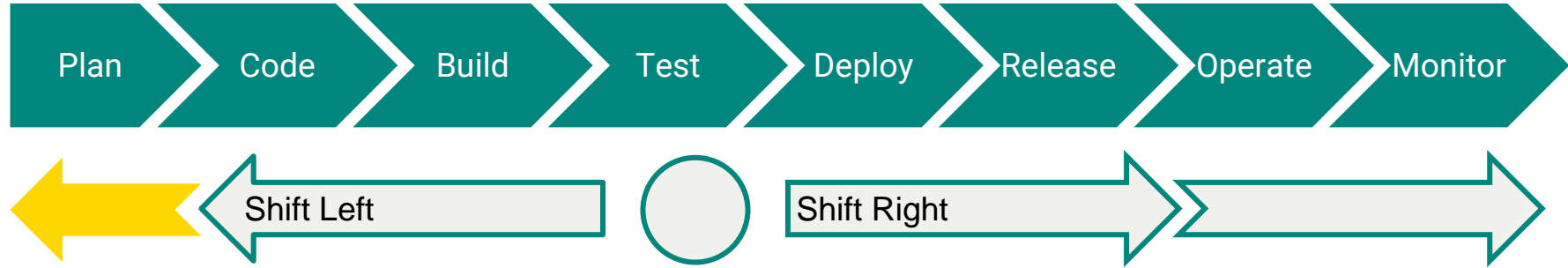**Canary Release and Dark Launch**

Chaos Engineering

https://aws.amazon.com/fis/

https://www.gremlin.com/chaos-monkey/the-simian-army/
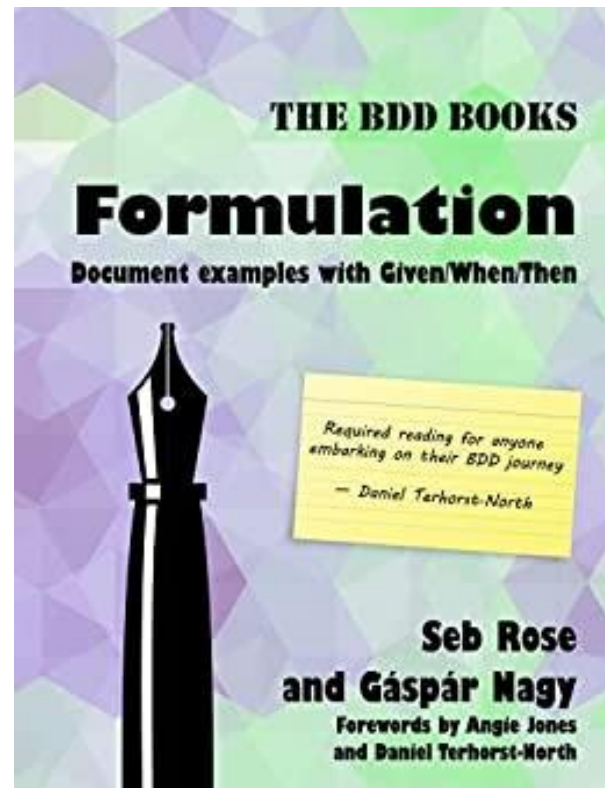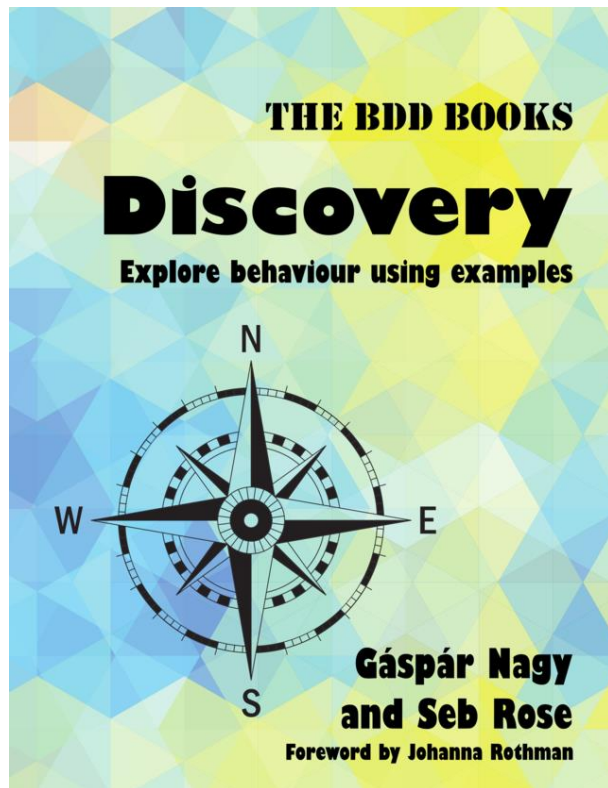
Customer Centric QA

Design Thinking

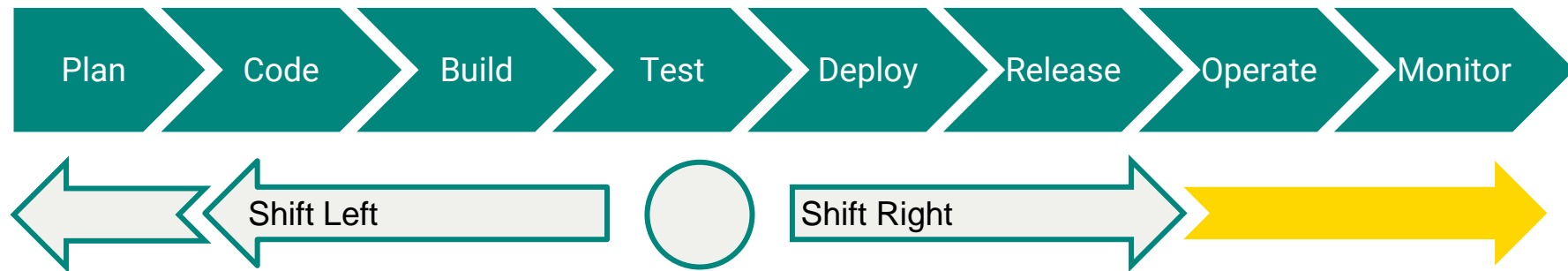**Personas, Empathy Maps, Customer Journey Mapping**

Story Mapping, BDD/ATDD

Design Feedback Through Prototypes

BDD books from Gaspar and Seb

THE BDD BOOKS

Discovery

Explore behaviour using examples

Gáspár Nagy
and Seb Rose

Foreword by Johanna Rothman

THE BDD BOOKS

Formulation

Document examples with Given/When/Then

Required reading for anyone
embarking on their BDD journey
— Daniel Terhorst-North

**Seb Rose
and Gáspár Nagy**

Forewords by Angie Jones
and Daniel Terhorst-North

QA in live

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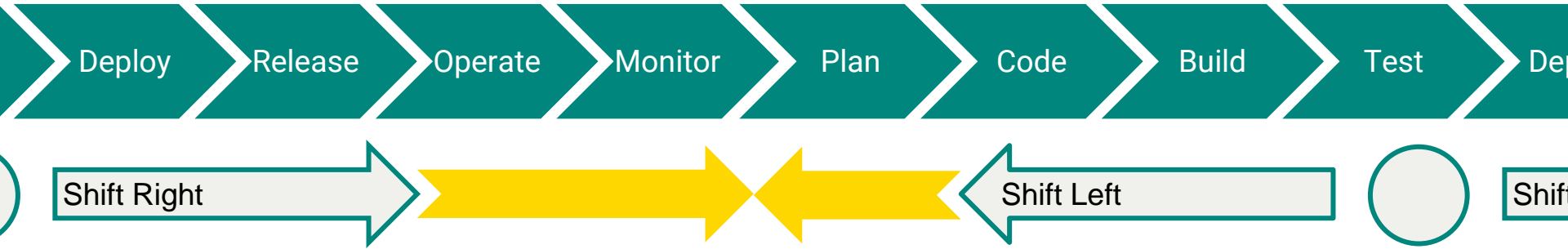| Plan | Code | Build | Test | Deploy | Release | Operate | Monitor |

Shift Left

Shift Right

Telemetry and Automatic Roll-back

Observability

A/B Testing

Social Media Monitoring

QA in the infinity loop

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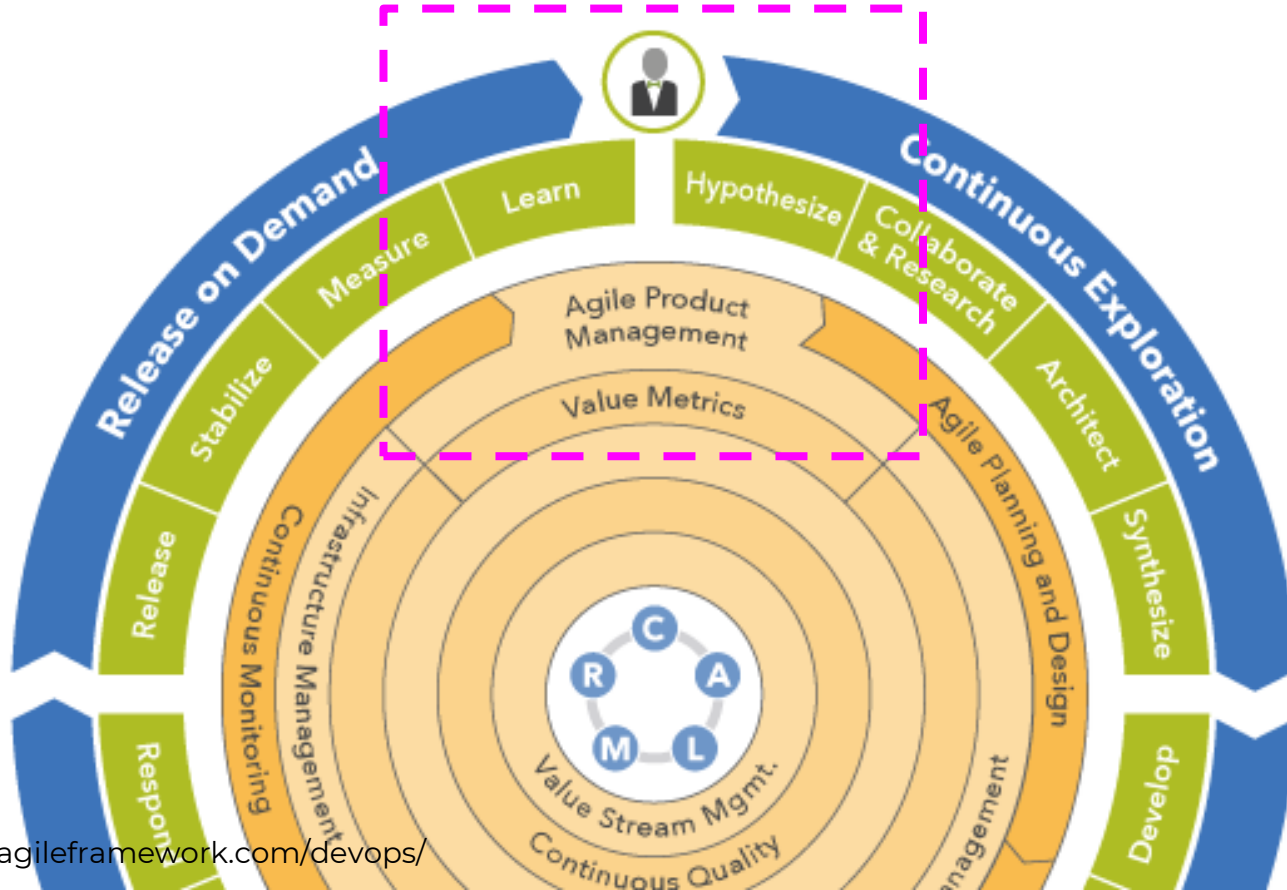| Deploy | Release | Operate | Monitor | Plan | Code | Build | Test | De |

Shift Right → ← Shift Left ○ Shift

Benefit Hypothesis and measurement

Lean startup thinking

Innovation Accounting
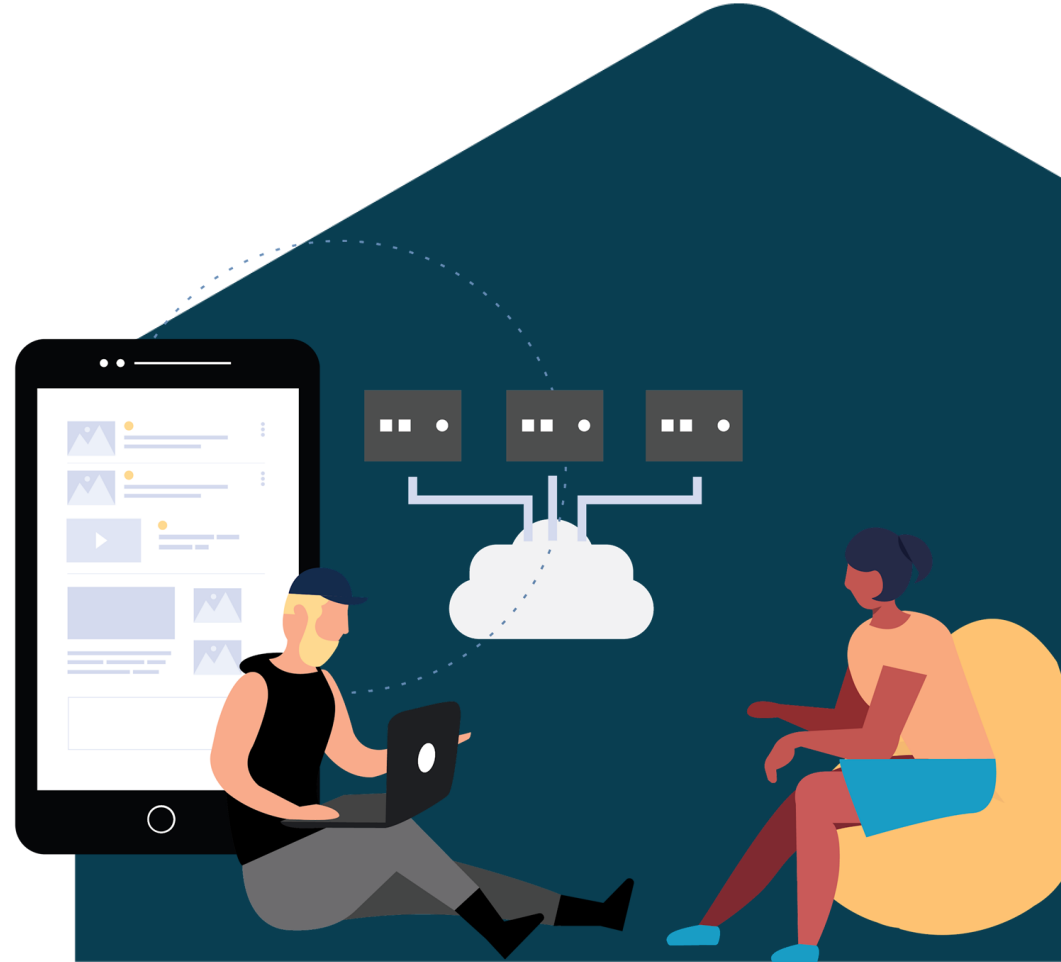
Minimum Viable Product

Continuous Learning and Experimentation

Take away

www.menti.com : 9328 1285

1. QA still has a role in all the Three ways of DevOps

2. You need to learn a lot of technology and new methods

3. There is a lot more both on the left and on the right

4. Testing is never boring, especially in DevOps!

What will you learn from tomorrow?

Thank you!

Szilard Szell

szilard.szell@eficode.com

https://www.linkedin.com/in/szellszilard/