

# Что такое DevOps и почему он помогает делать программные продукты лучше, а пользователей счастливее

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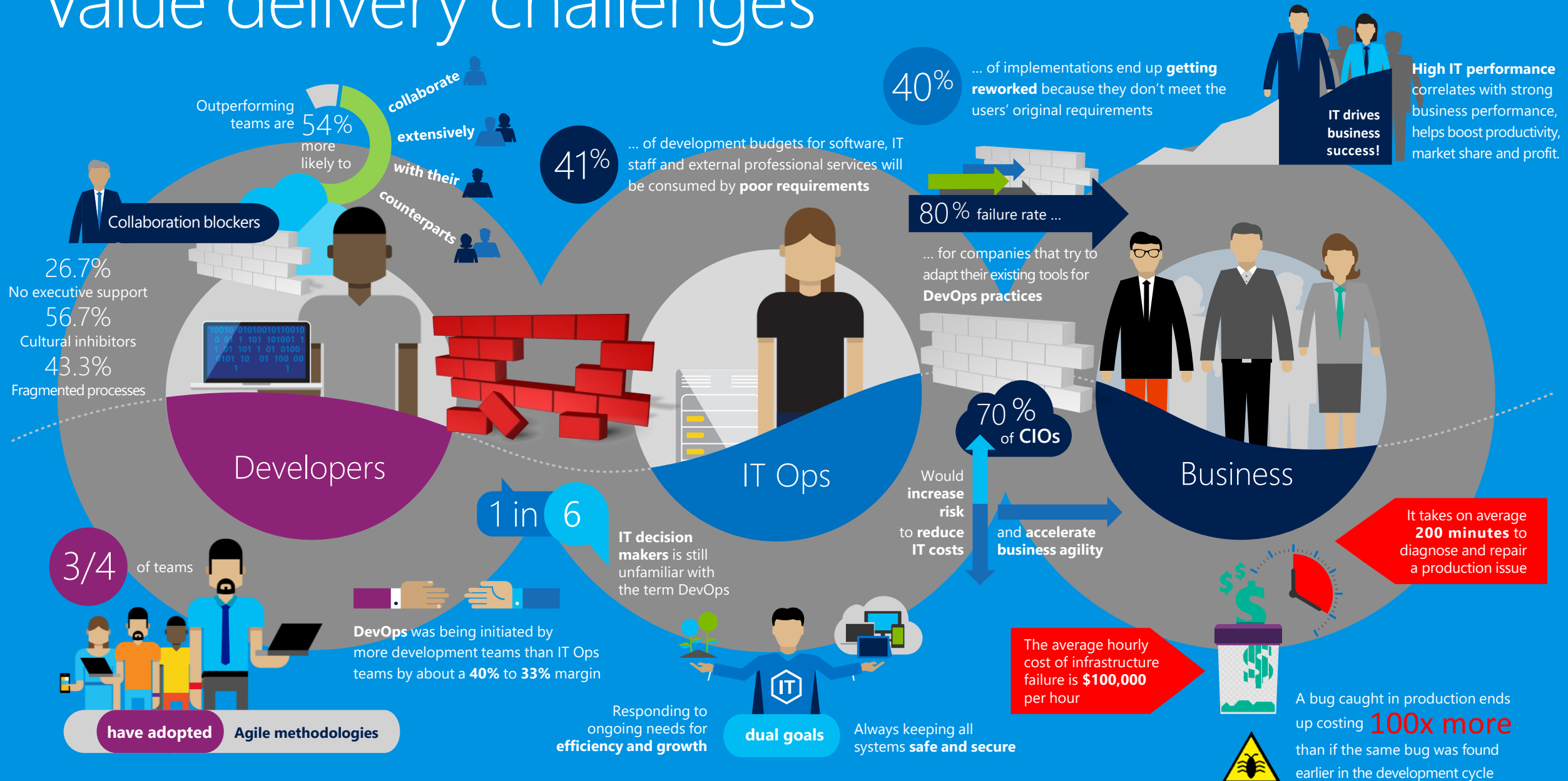
ВЛАДИМИР ГУСАРОВ

ДИРЕКТОР R&D, ONE IDENTITY (QUEST SOFTWARE)

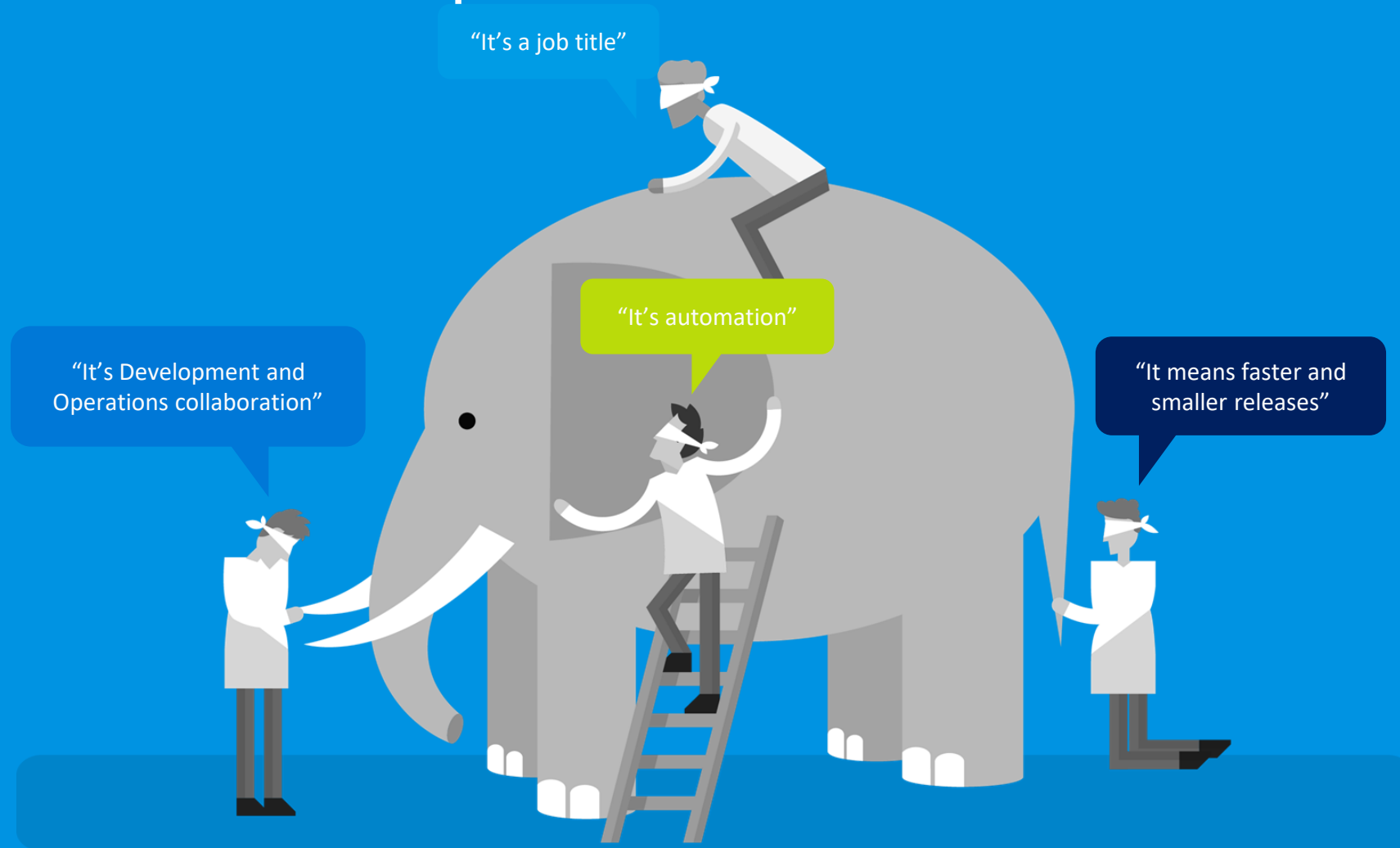
VISUAL STUDIO ALM MVP

ALM RANGER

# Value delivery challenges



# What is DevOps?



# The DevOps conversation



## ***PEOPLE***

Collaborate more  
Share common goals  
Focus on improvement

*BRINGING PEOPLE TOGETHER*



## ***PROCESS***

Eliminate waste  
Increase efficiency  
Streamline feedback

*DELIVERING VALUE FASTER*



## ***TOOLS***

Enhance productivity  
Enable collaboration  
Facilitate experimentation

*EXECUTING A DEVOPS STRATEGY*

# DevOps habits and practices

## PRACTICES

Automated Testing  
Continuous Integration  
Continuous Deployment  
Release Management

*FLOW OF  
CUSTOMER  
VALUE*

*TEAM  
AUTONOMY  
& ENTERPRISE  
ALIGNMENT*

## PRACTICES

Automated Testing  
Continuous Integration  
Continuous Deployment  
Release Management

## PRACTICES

Usage Monitoring  
Telemetry Collection  
Testing in Production  
Stakeholder Feedback

*BACKLOG  
refined with  
LEARNING*

*EVIDENCE  
gathered in  
PRODUCTION*

## PRACTICES

Testing in Production  
Usage Monitoring  
User Telemetry  
Stakeholder feedback  
Feature flags

## PRACTICES

Code Reviews  
Automated Testing  
Continuous Measurement

*MANAGED  
TECHNICAL DEBT*

## PRACTICES

Application Performance Management  
Infrastructure as Code  
Continuous Deployment  
Release Management  
Configuration Management  
Automated Recovery

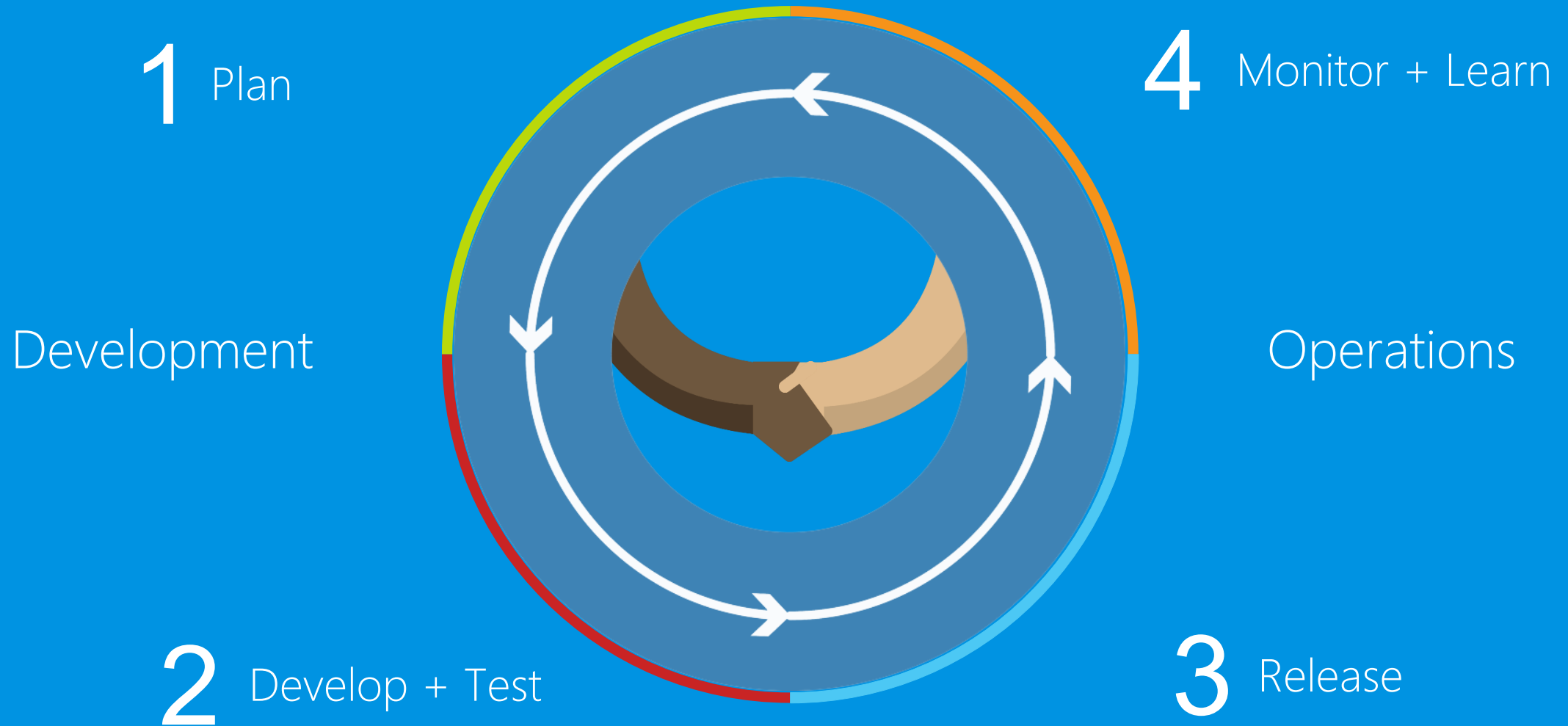
*PRODUCTION  
FIRST MINDSET*

## PRACTICES

Application Performance Management  
Infrastructure as Code  
Continuous Delivery  
Release Management  
Configuration Management  
Automated Recovery

*INFRA-  
STRUCTURE  
is a FLEXIBLE  
RESOURCE*

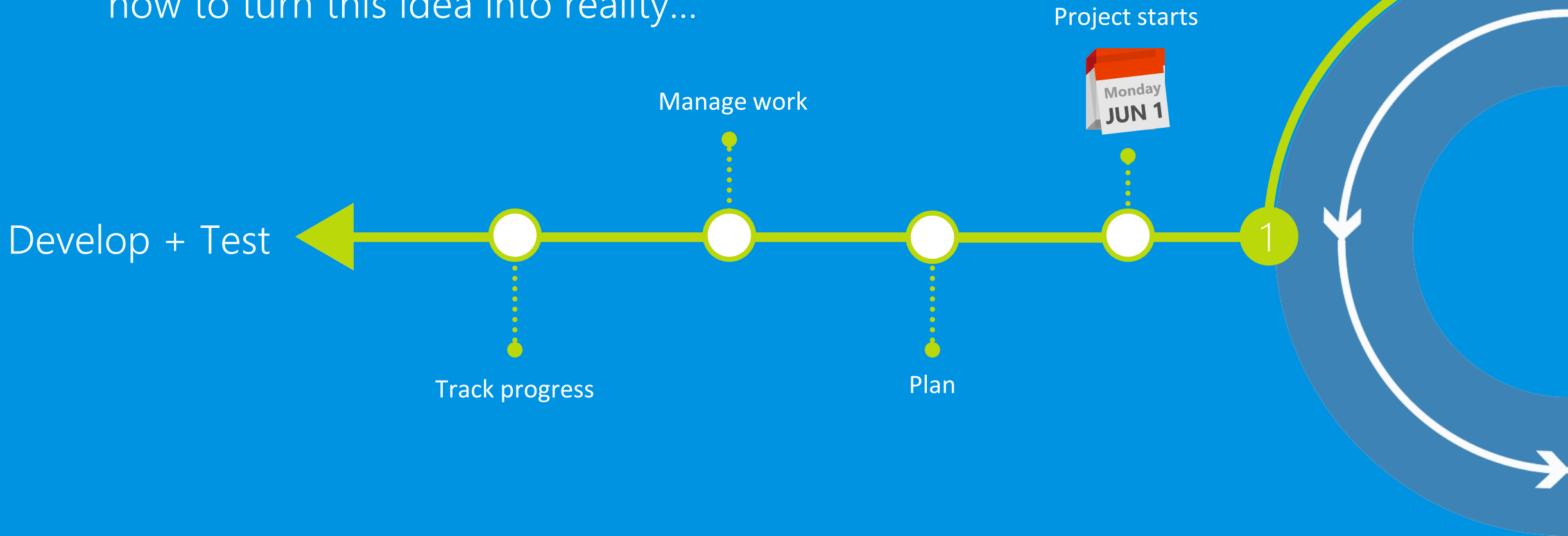
# A converged lifecycle

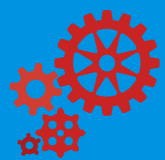




# Plan

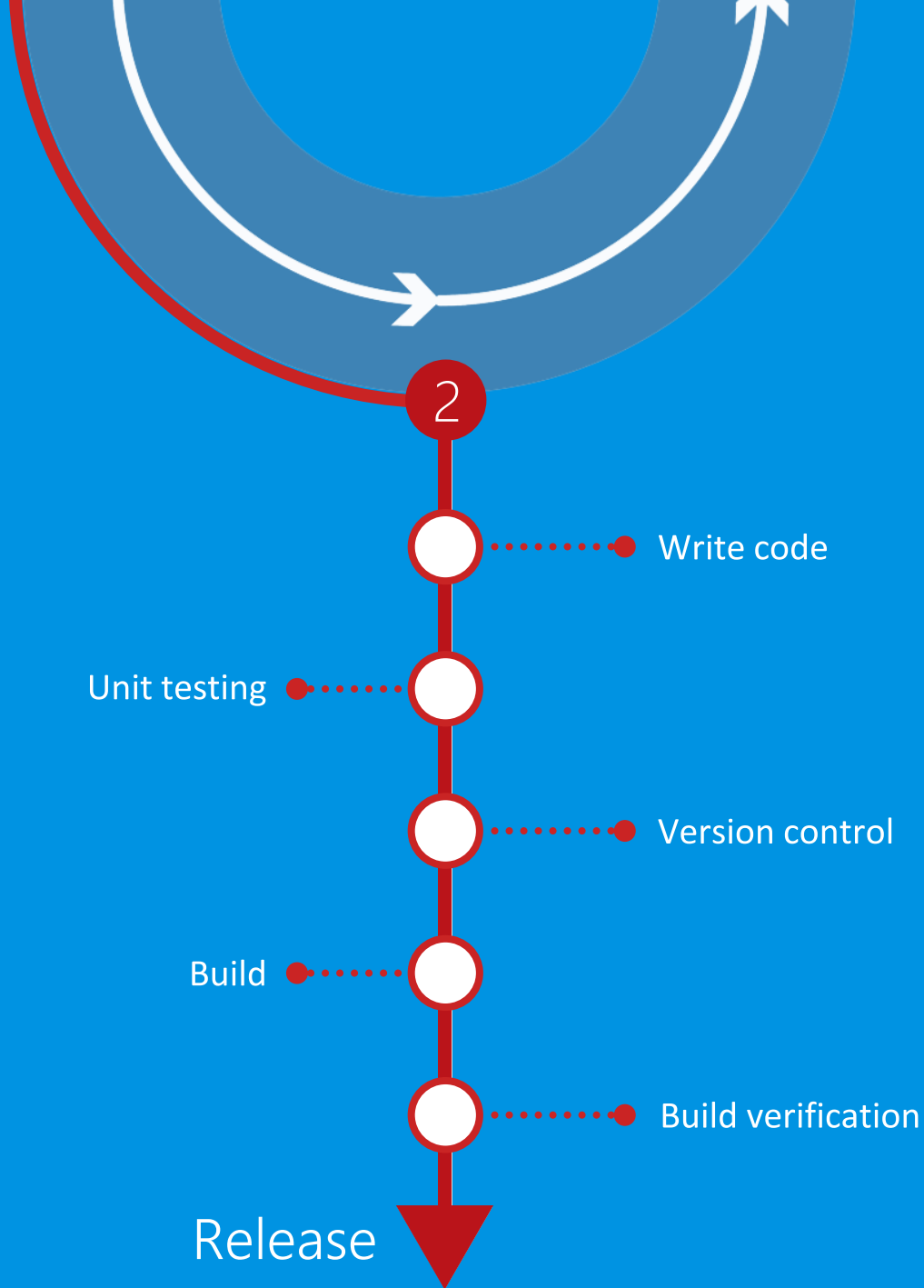
It starts with an idea - and a plan  
how to turn this idea into reality...





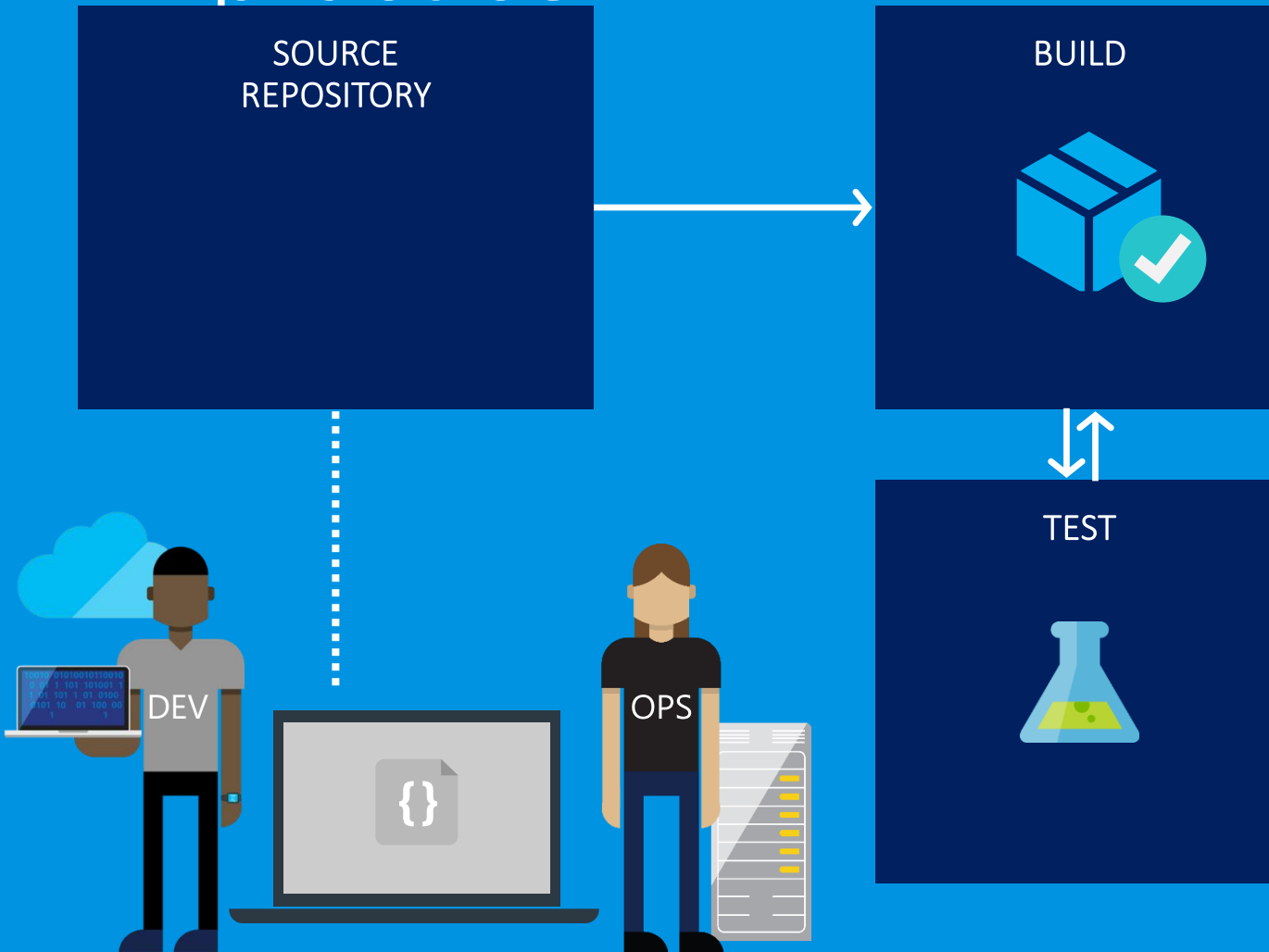
# Develop + Test

Once the iteration starts, developers turn great ideas into features...





# Continuous Integration (CI) – a DevOps practice



## Issues

- Delivery delays
- Non-working/low-quality code
- Incomplete solutions
- Rework

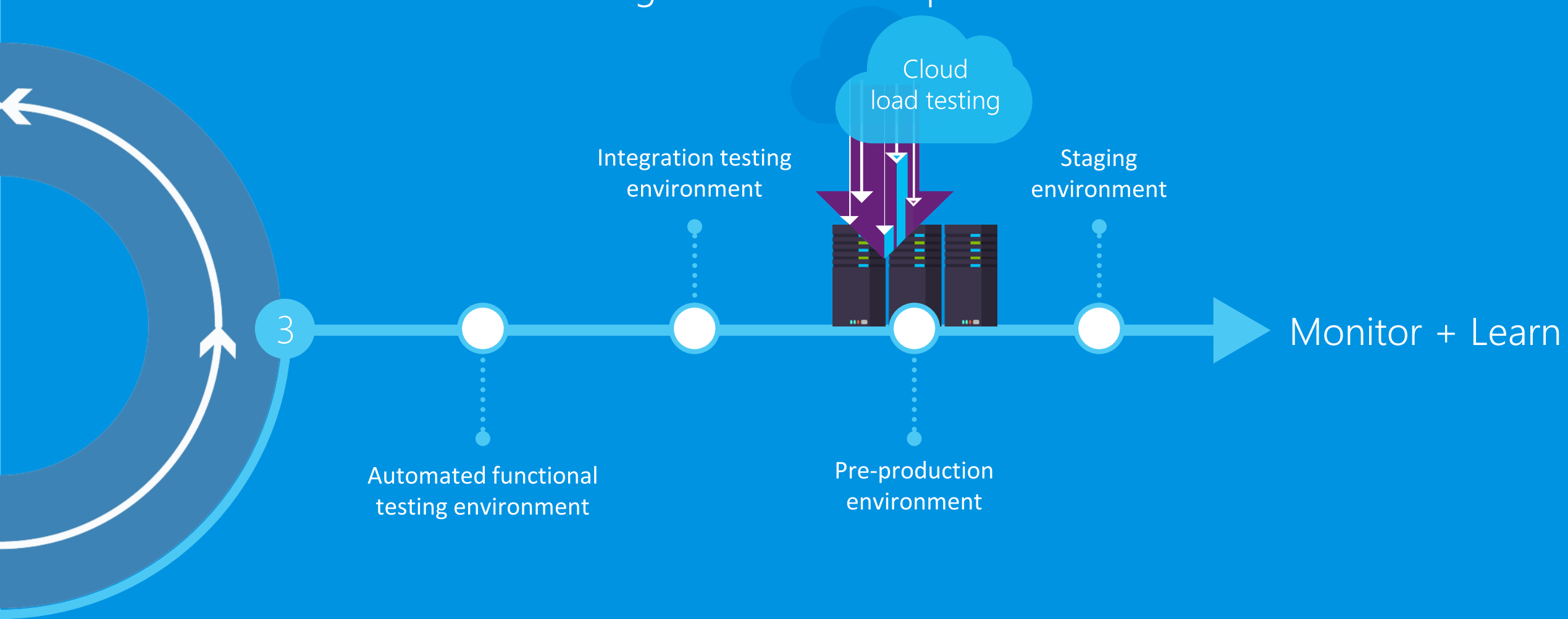
## Value

- Frequent integration
- Higher quality
- Repeatability



# Release

When all tests pass, the build is deployed to testing environments for each stage in the release process



# Continuous Delivery (CD) – a DevOps practice

SOURCE  
REPOSITORY



DEVELOPMENT



STAGING



PRODUCTION



## Issues

- Slow delivery cadence
- Limited predictability when deploying
- Complexity when deploying

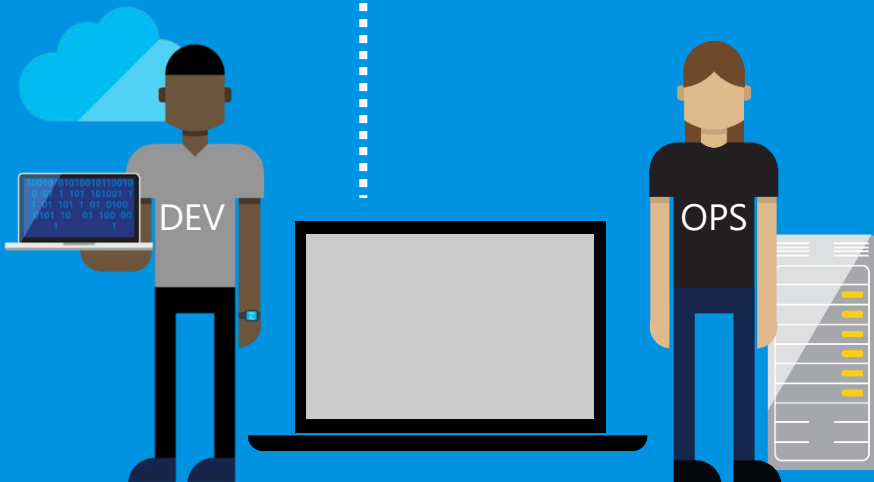
## Value

- Consistency
- Accelerated deployment
- Repeatability
- Human error reduction



# Infrastructure as code (IAC) – a DevOps practice

SOURCE  
REPOSITORY



DEV



STAGE



PRODUCTION



## Value

- Optimize resources
- Accelerate delivery

## Measure

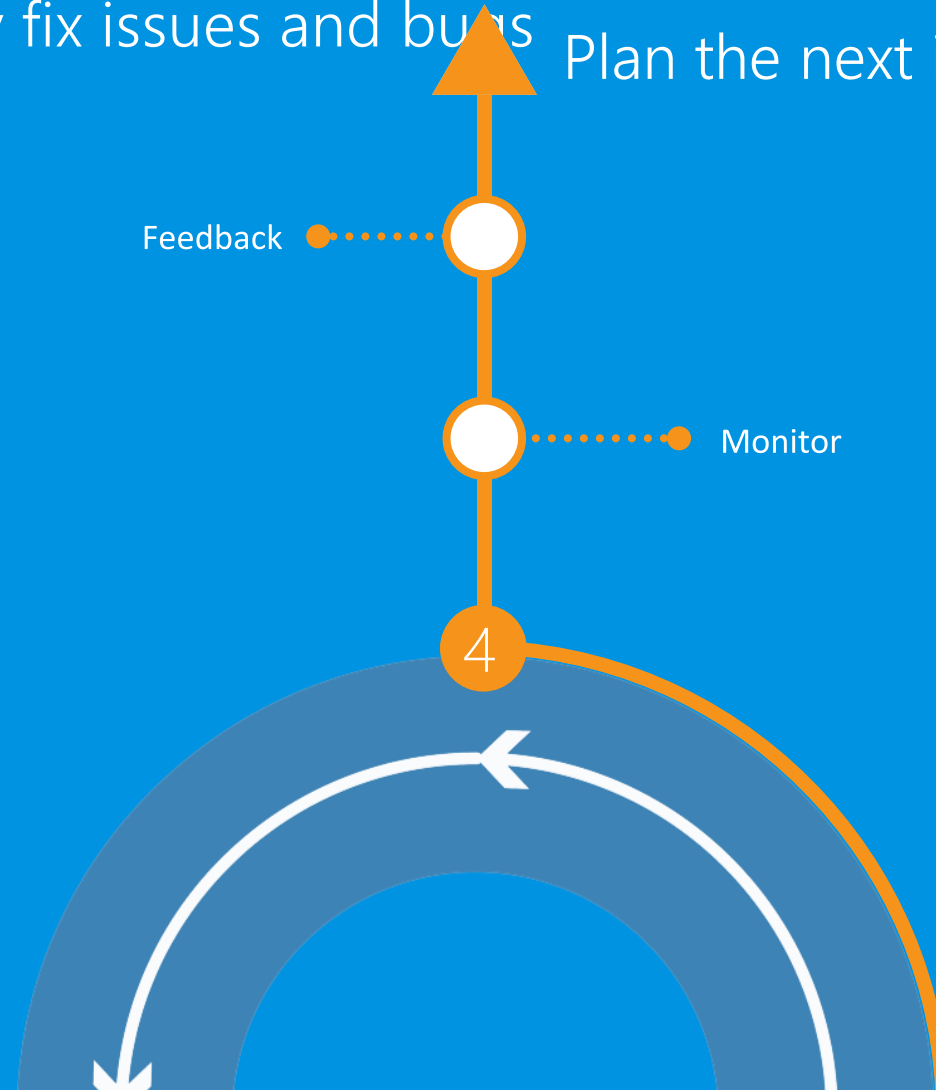
- Deployment rate
- MTTR



# Monitor + Learn

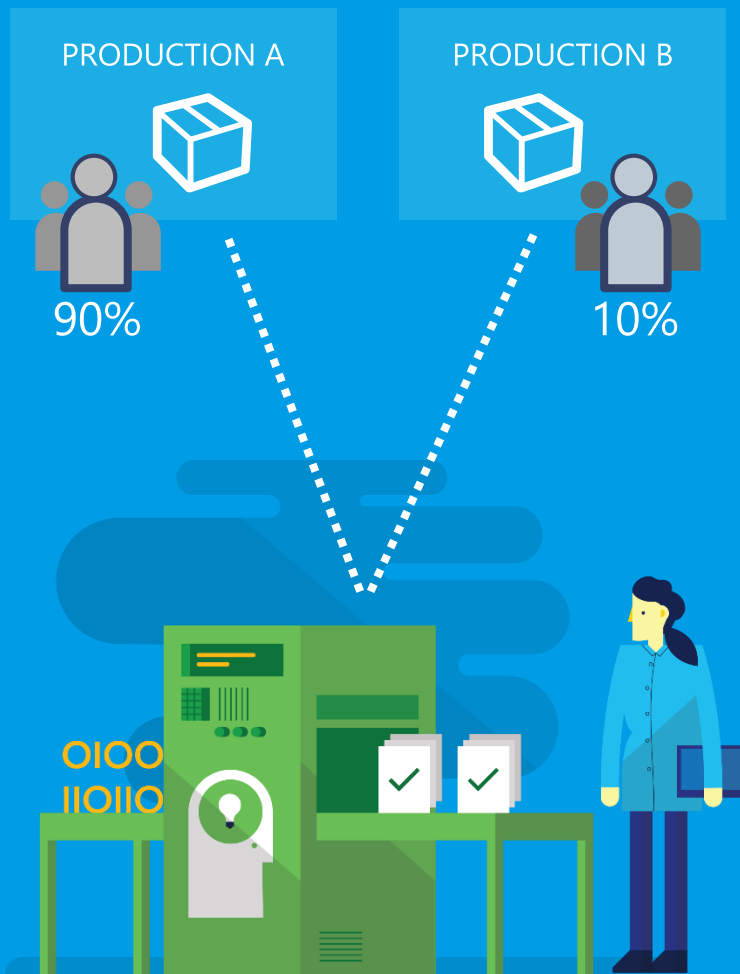
Learn and understand how users use your app, how it reacts and quickly fix issues and bugs

Plan the next iteration

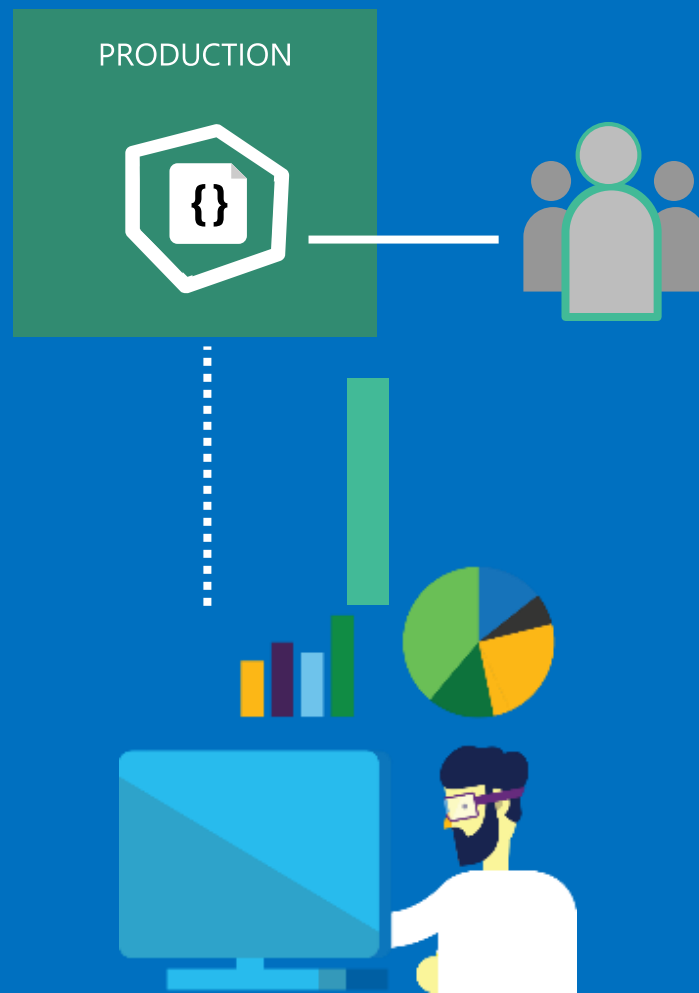


# Learning from production – DevOps practices

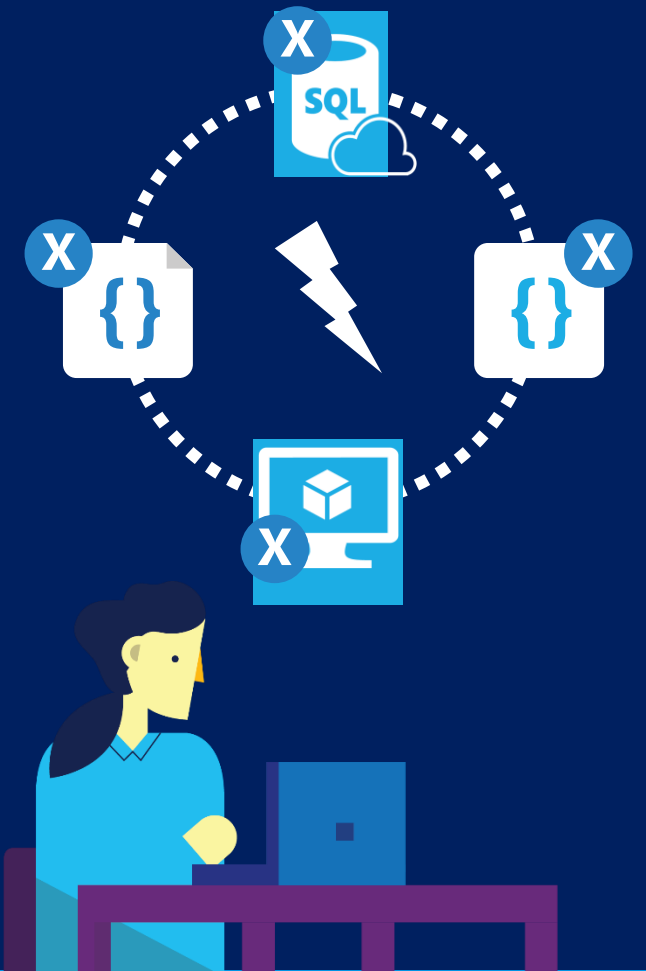
## Testing in production



## Telemetry



## Fault injection



# управление выпуском

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{ДЕМОНСТРАЦИЯ}

# Примеры успеха

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Team Foundation Server

- Выпуск каждые 3 месяца

Visual Studio Team System

- Выпуск каждые 3 недели



# Спасибо за внимание!

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