



# DevOps Explained

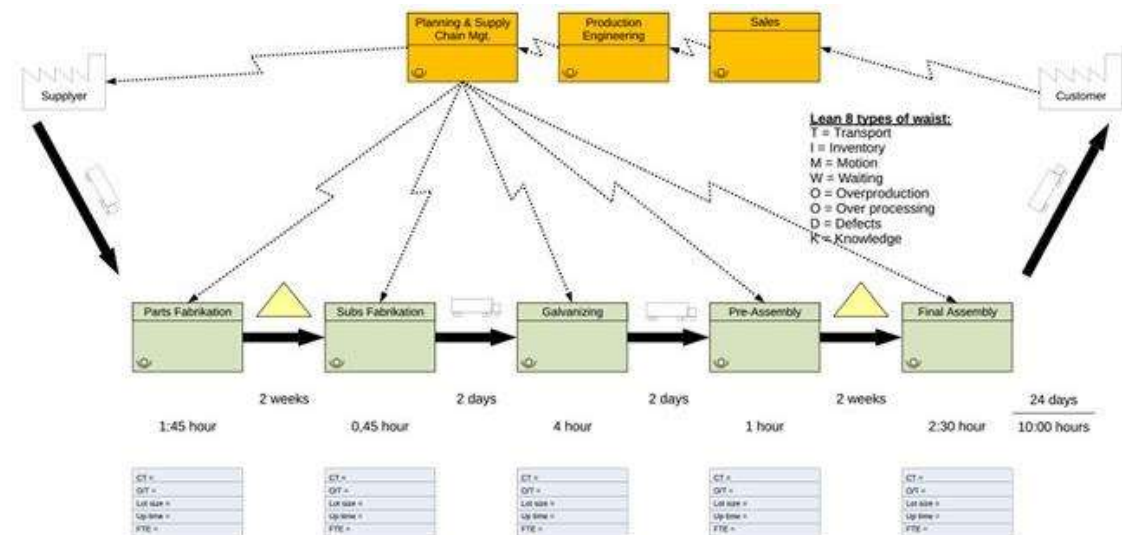
# Overview

- What is DevOps
- CI/CD Explained
- The DevOps Process
- DevOps Practices and Technologies
- The Evolution of IT Services
- Leverage DevOps for Organizational Improvement

Create an as-is value stream map with all people responsible for creating the flow of value from product to the customer — identify where waits and rework occur, establish a to-be value stream map

# Understanding the Value Stream

- A technology value stream is “the process required to convert a business hypothesis into a technology-enabled service that delivers value to the customer”
- All the people, processes and resources required to fulfill a customer’s request, from the time of request until it’s fulfillment

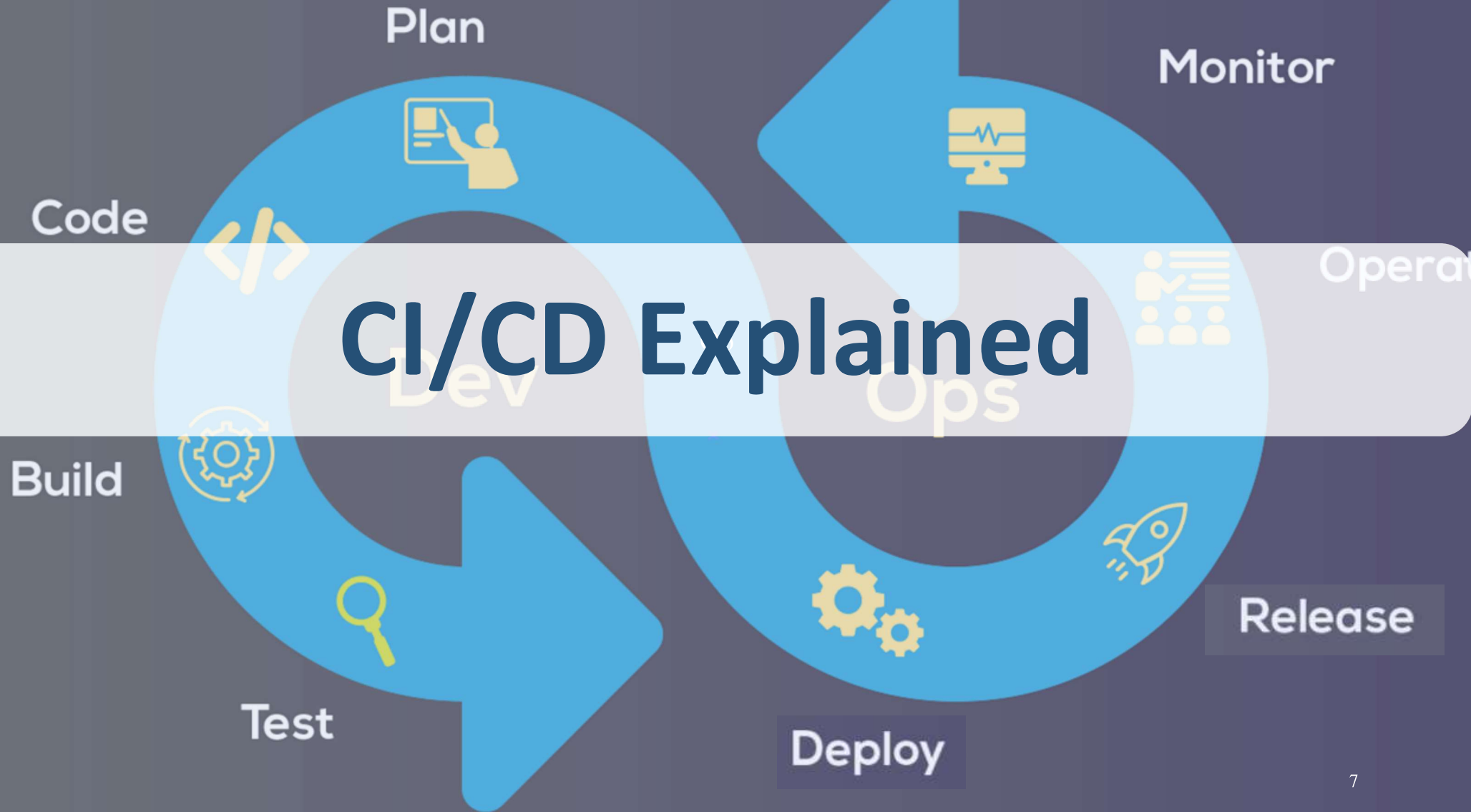


Apply lean principles to avoid the seven forms of software waste

# The Seven Wastes of Software Development



# CI/CD Explained



# A Definition of DevOps

- A two-pronged methodology that includes a combination of philosophies, tools, and practices from development (“Dev”) and IT operations (“Ops”).
- Accelerates the delivery of software products, increased velocity, reduce time to market, better satisfy user needs quickly
- Relies on a culture of collaboration between people who have historically operated in separate organizational silos — the development and operations departments.

With each handoff, some knowledge is inevitably lost

# The CI/CD Pipeline

The continuous delivery pipeline is the cornerstone of DevOps

- Continuous Integration (CI-1)
- Continuous Delivery (CD-1)
- Continuous Deployment (CD-2)
- Continuous Innovation (CI-2)