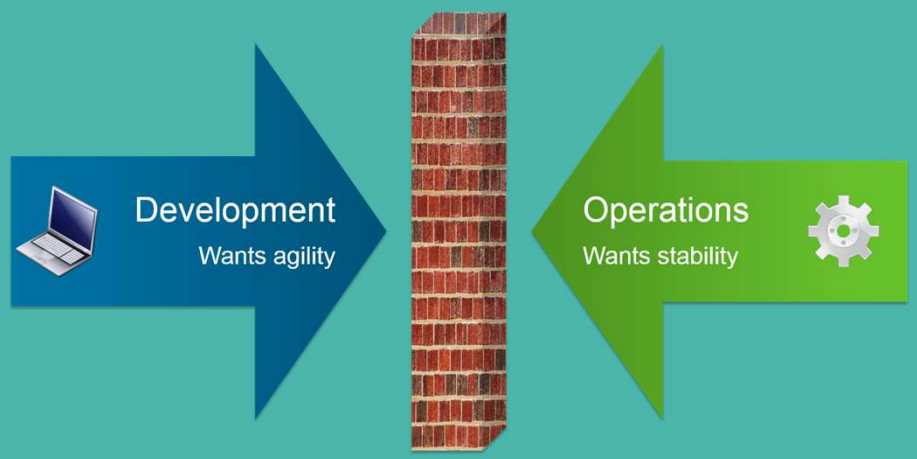
DevOps

Agenda

- Concept
- Challenges
- Solutions
- Opportunities

Introduction

What and Why?



"Devs are from Venus
Ops are from Mars"

Steven Haines

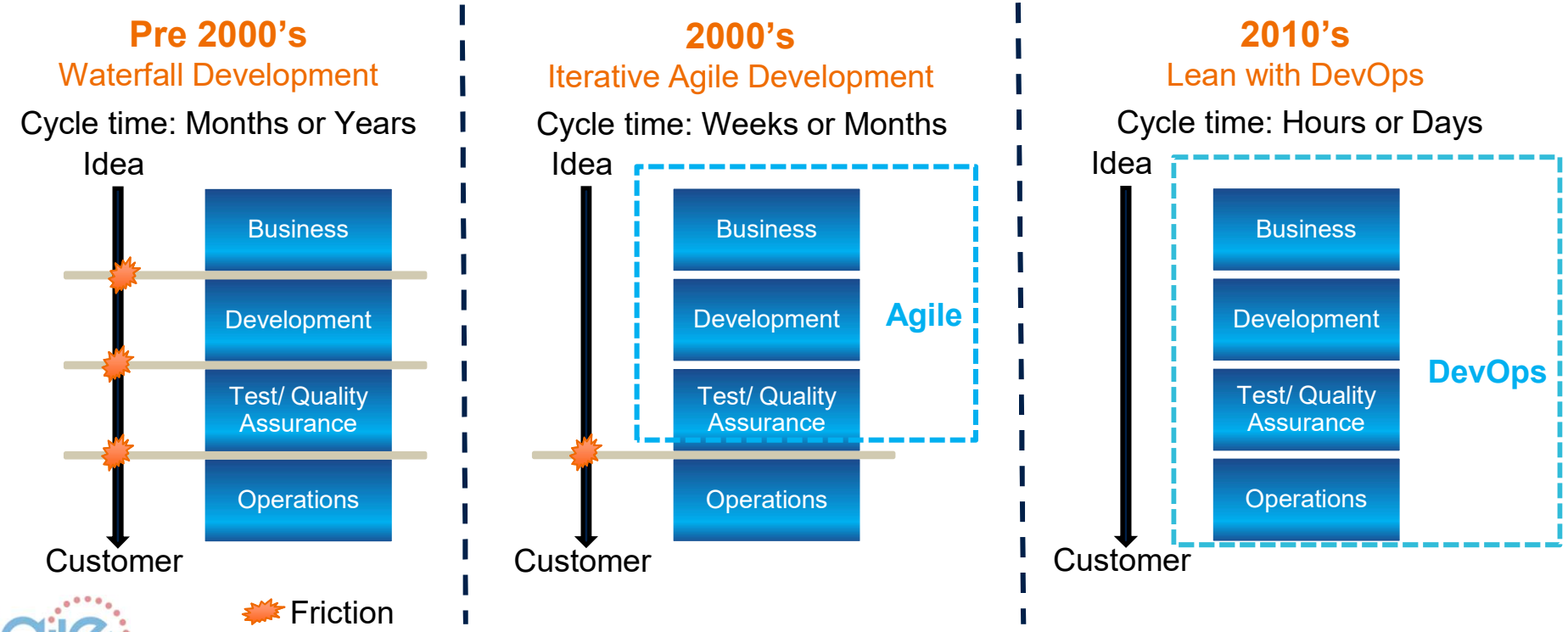
Definition

"DevOps is a set of practices and cultural changes — supported by automation tools and Lean processes — that creates an automated software delivery pipeline, enabling organizations to deliver better-quality services and applications faster."

Forrester

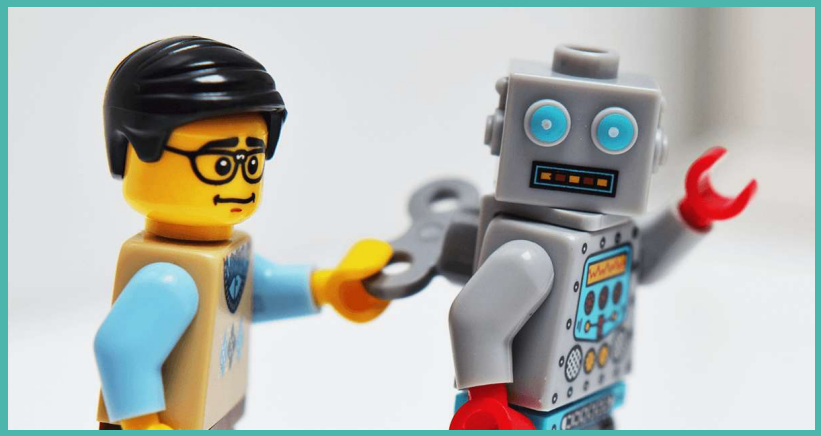
Elaborating DevOps

Background

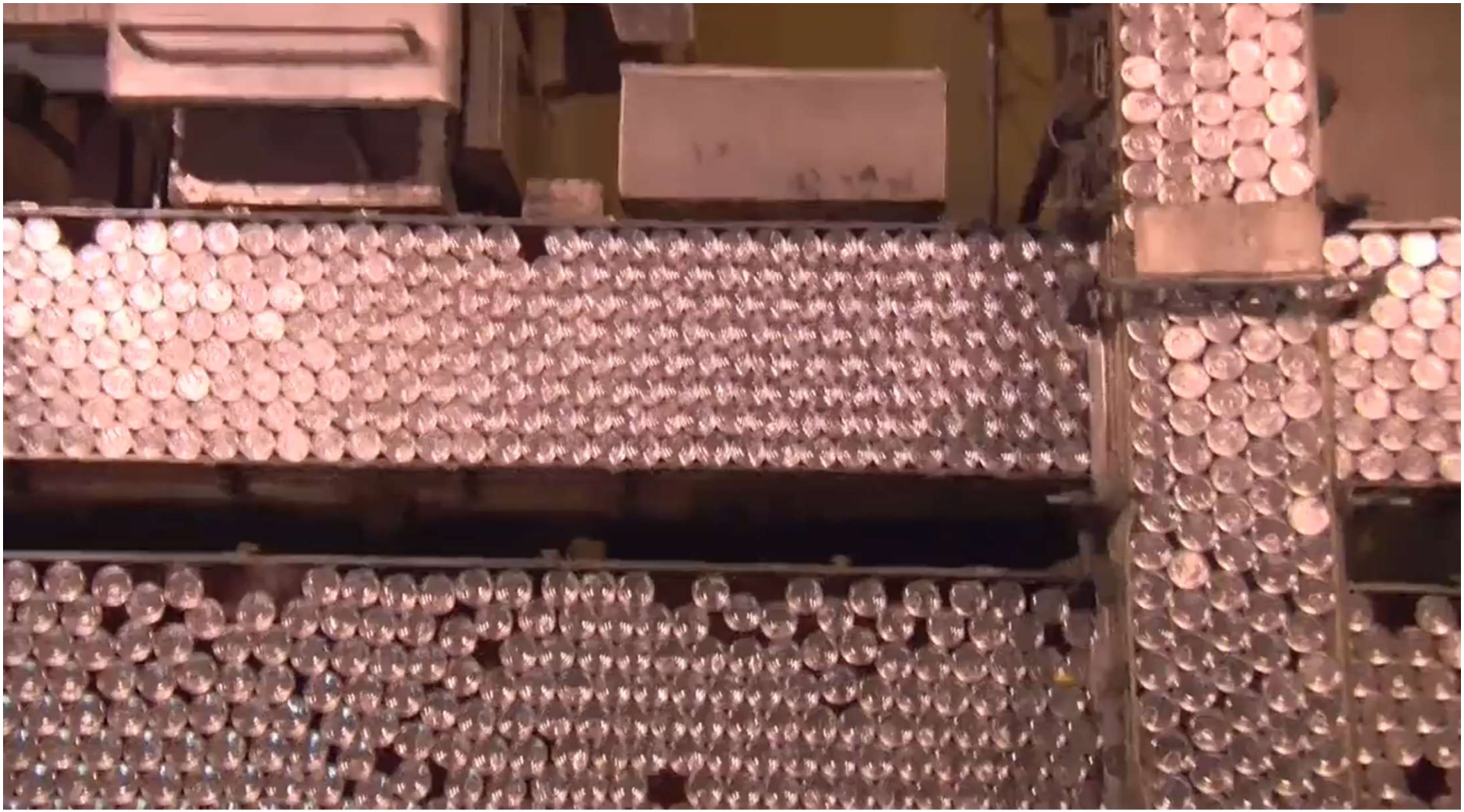

Pre 2000's
Waterfall Development
Cycle time: Months or Years
Idea
Business
Development
Test/ Quality Assurance
Operations
Customer
Friction
2000's
Iterative Agile Development
Cycle time: Weeks or Months
Idea
Business
Development
Test/ Quality Assurance
Operations
Agile
Customer
2010's
Lean with DevOps
Cycle time: Hours or Days
Idea
Business
Development
Test/ Quality Assurance
Operations
DevOps
Customer

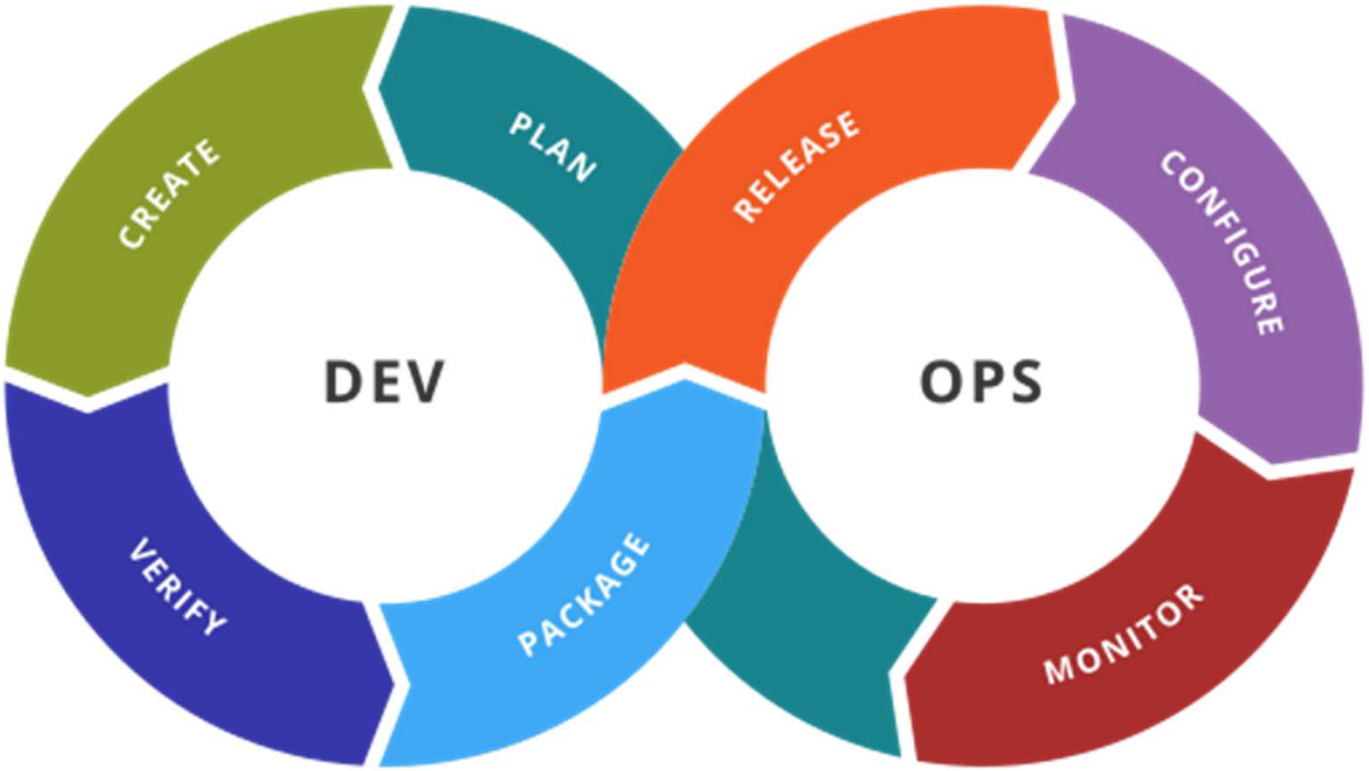
Problem 1

Automating Software Delivery Pipeline



"If you automate a mess, you get an automated mess"





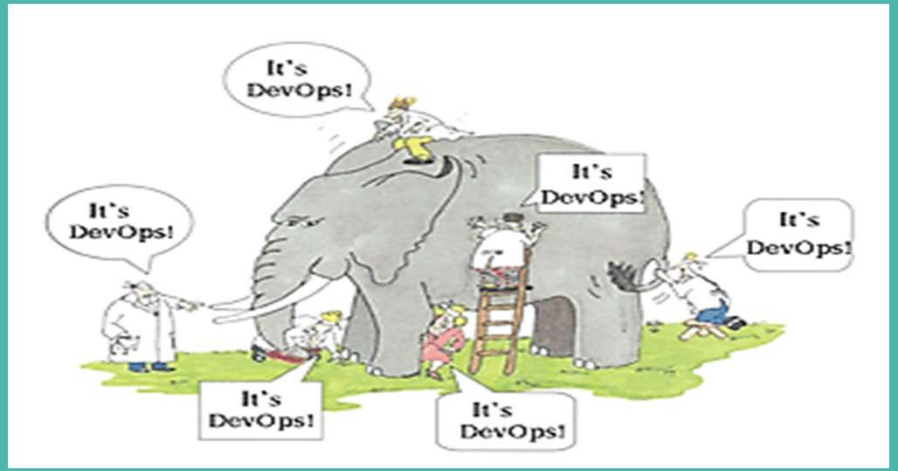
Automated Software Delivery Pipeline

Problem Space

Solution Space

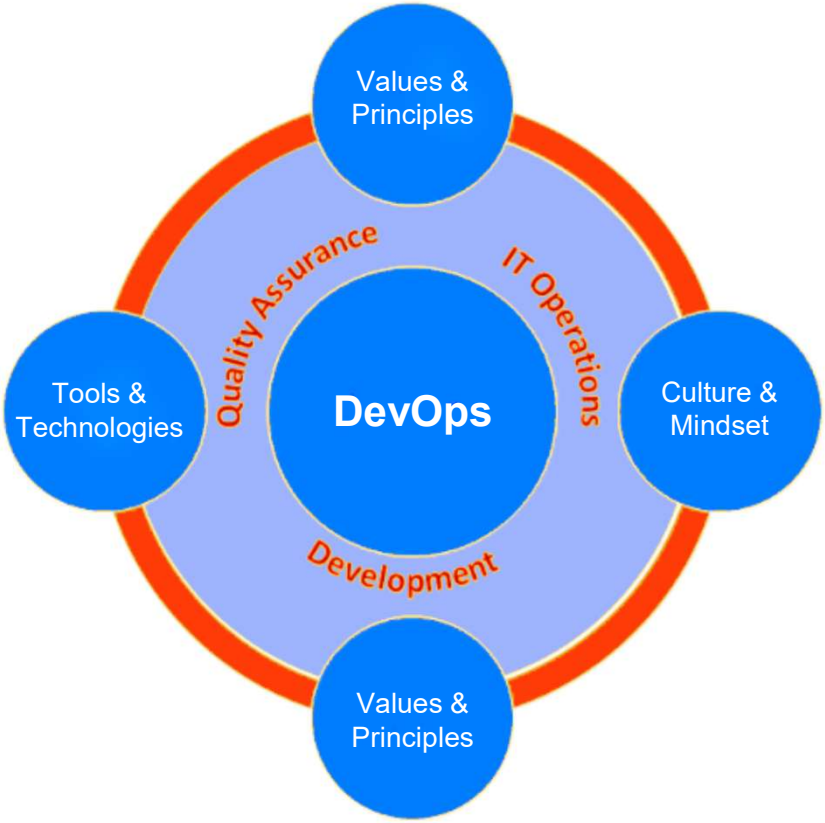
Problem 2

Aligning Various Perspectives



"Any organization that designs a system will inevitably produce a design whose structure is a copy of the organization's communication structure"

Melvin E. Conway



DevOps Perspectives

Problem Space

Organization

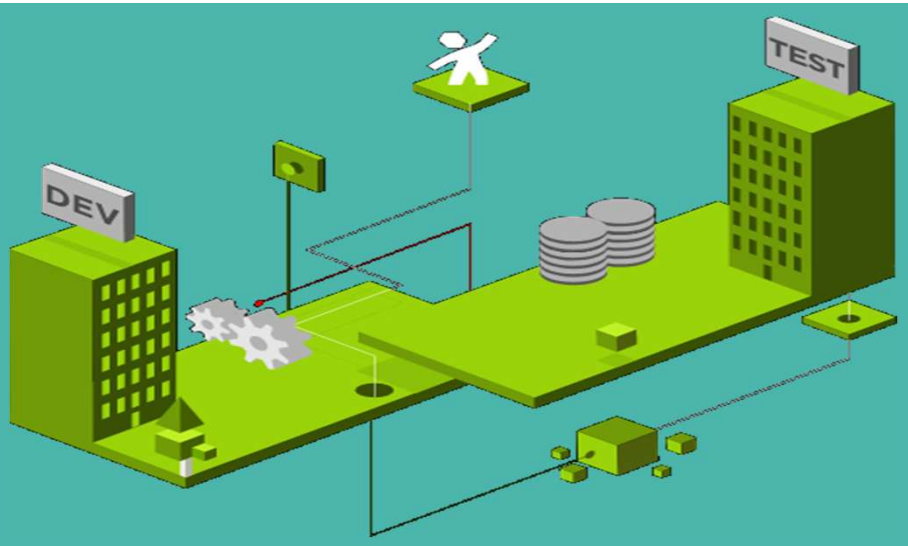
Orientation

Ownership

Solution Space

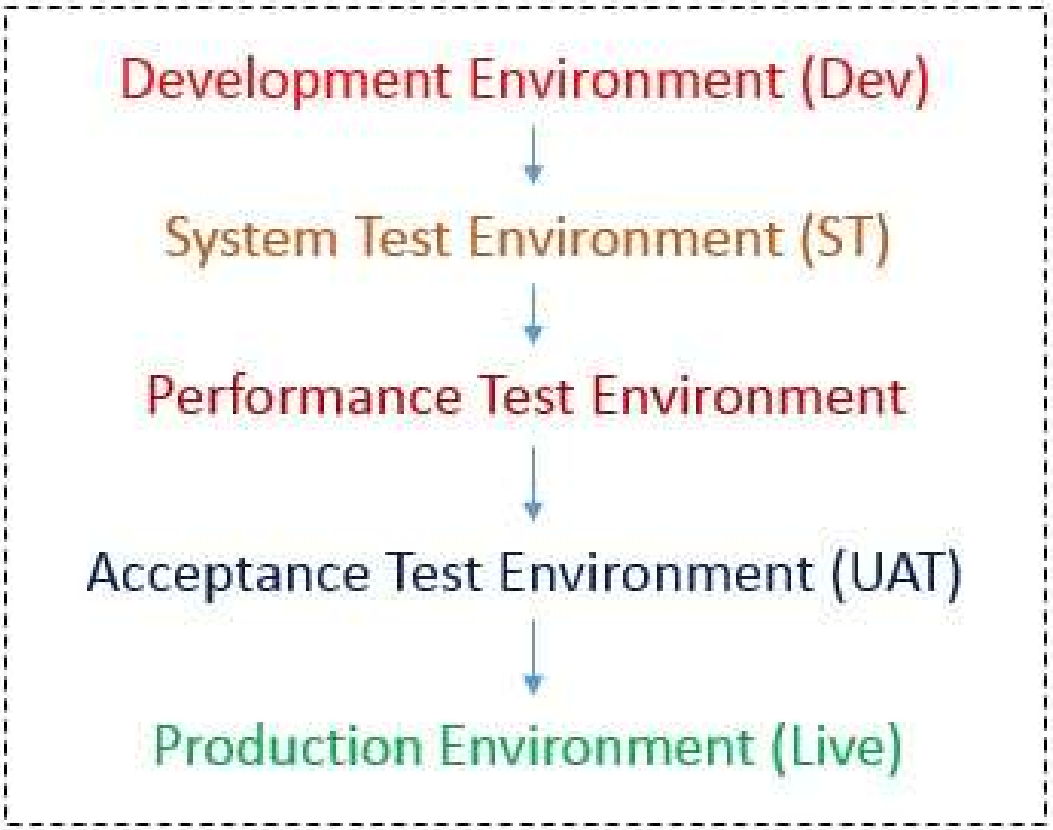
Problem 3

Environments Management



"Move fast with stable infrastructure"

Mark Zuckerburg



Environments Management

Problem Space

nfrastructure

ntegration

solation

Solution Space

nfrastructure Plan, Budget, Codify

ntegration Auto-triggering, Rollback, Alerts

solation SREs, Synchronization, Config Management

Problem Checklist

Automating Software Delivery Pipeline

Aligning Various Perspectives

Environments Management

Opportunities

Faster and Reliable
Development and Delivery

“You build it, you run it”

Werner Vogels

Success Stories

400-800 devs at any given time
Supporting 10 million lines of code
Only 2 releases per year

U.S. Citizenship and Immigration Services

Receives and processes 6 million applications a year
2000 IT Employees
$500 million IT budget

LLOYDS BANKING GROUP

Lloyds Banking Group can trace its history back to 1765 – no company is too old to implement a DevOps model!
Fintech companies are disrupting the financial services industry – reaching younger customers, developing new payment methods, and quickly reacting to changes to the market. Traditional banks don't want to be left behind.

Reasons

Quicker Deployment Cycles
Increase in Product Quality
Faster Innovation Cycles
Reduction in Suspension of Operations

How often do the high performing organizations deploy their code now a days?

2017 DevOps Report for High Performers

Frequently Asked Questions

- Is DevOps only for companies with cloud products?
- Is DevOps all about implementing tools and technologies?
- Does placing a new team between Dev and Ops will ensure DevOps?
- Should we overhaul our entire Ops tools and technology stack immediately to do DevOps?
- Does DevOps require co-location of Dev and Ops teams?

Get Started Today

Long Journey Ahead

Better Start Today

Do you need help?

DevOps is not a goal but a never ending process of continual improvement – Jez Humble

Thank You!