DevOps

Applications Development and Operation in the future

Préger Lajos
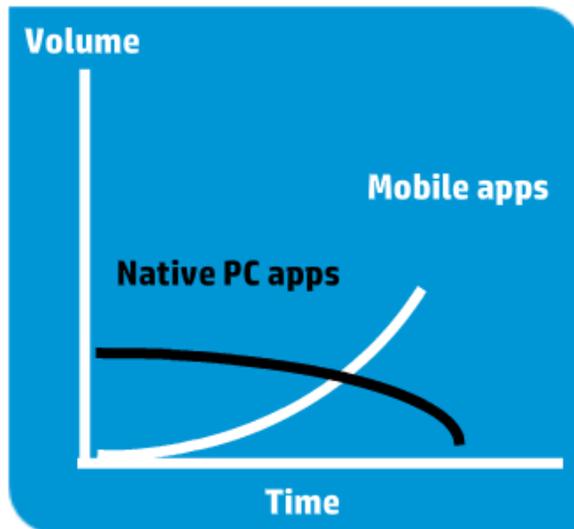
2015.10.30.

The enterprise is under pressure to become more nimble
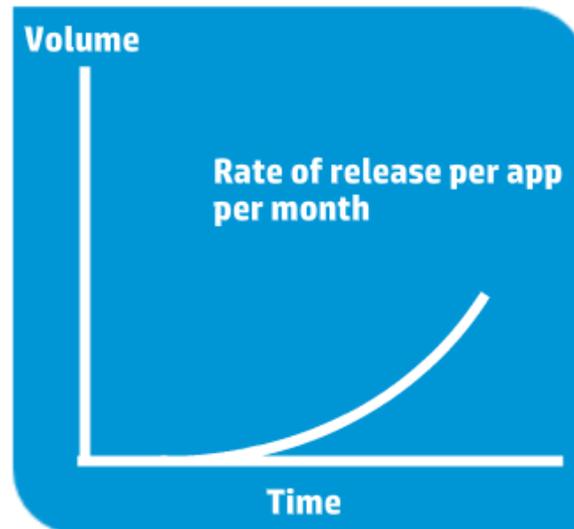
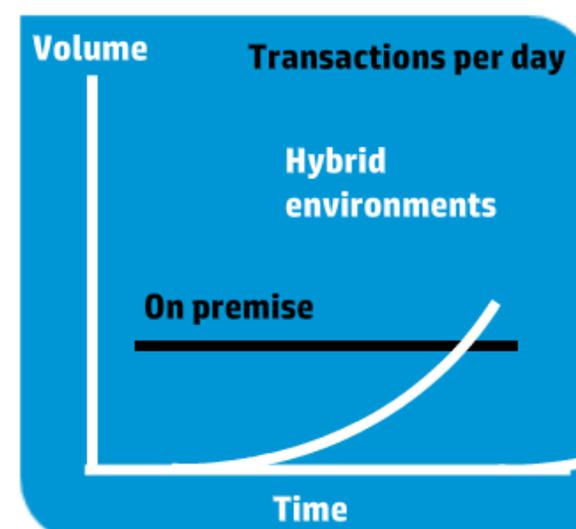Trends of a User Centric World with Mobile and Cloud

Mobility

Volume

Mobile apps

Native PC apps

Time

Velocity

Volume

Rate of release per app per month

Time

Cloud

Volume

Transactions per day

Hybrid environments

On premise

Time

Business needs: velocity and quality

BUT: Enterprise is struggling to keep up..

The Business

VP of Apps

QA

VP of Ops

The Customer

We need to innovate IT never deliver faster on time
Our customers are unhappy

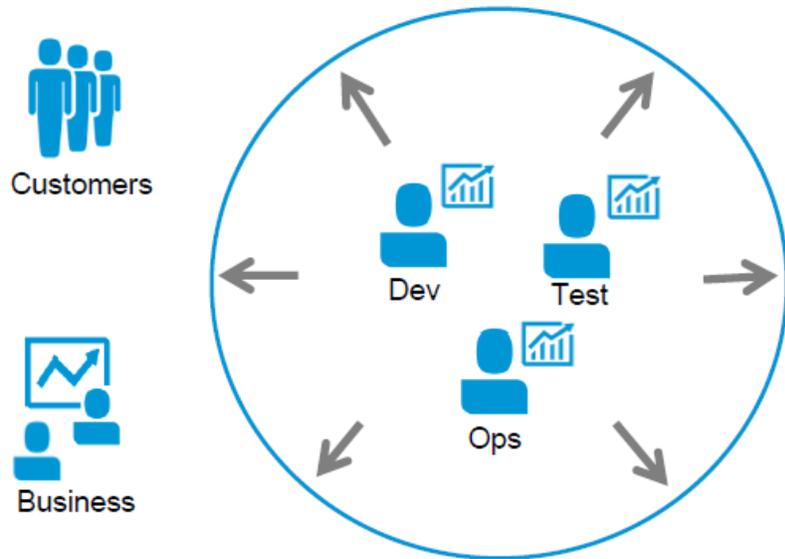We are struggling to increase pace of delivery *(50% projects late)*

We are releasing too many defects *(20% defects leaked)*

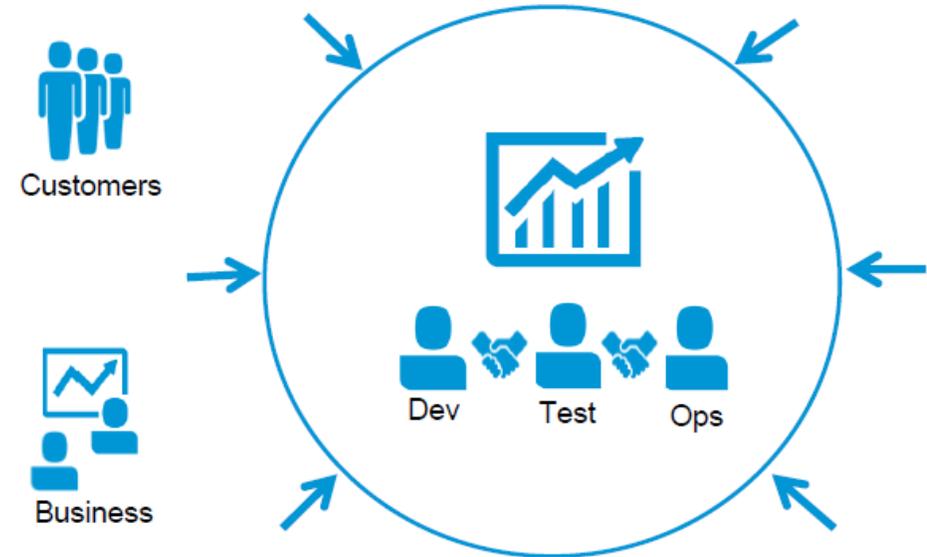We cannot risk frequent changes to production *(50% releases rollbacked)*

Market trends are forcing a shift in focus

From internal IT perspective to a customer driven perspective

Internal IT driven
- ✓ Reduce cost, defects and incidents
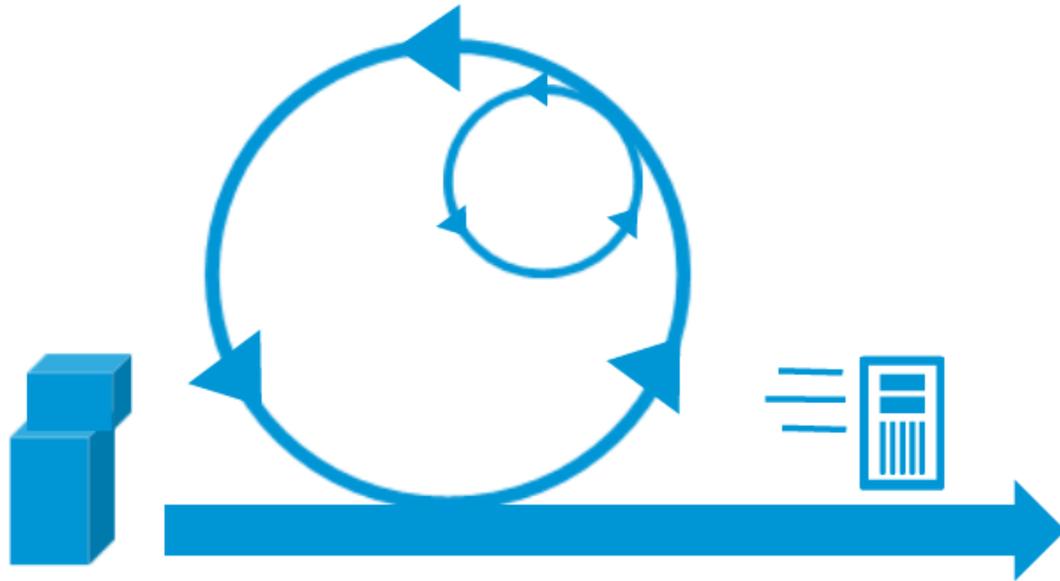- ✓ Focus on SLA's – how many outages, performance and availability

Customer driven
- ✓ Provide positive customer experience
- ✓ Faster and frequent time to market
- ✓ Gain a competitive advantage

The classic release bottleneck

Apps Development

IT Operations

"Be more agile – deliver faster"

Features & code changes

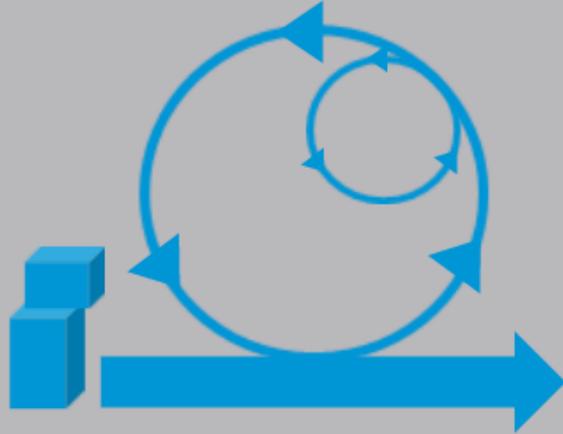**"Change is evil"**

DevOps Solution Vision

Apps Development

IT Operations

Keys to bridge the gap:

Quality

Automation

Collaboration

Governance

Integration
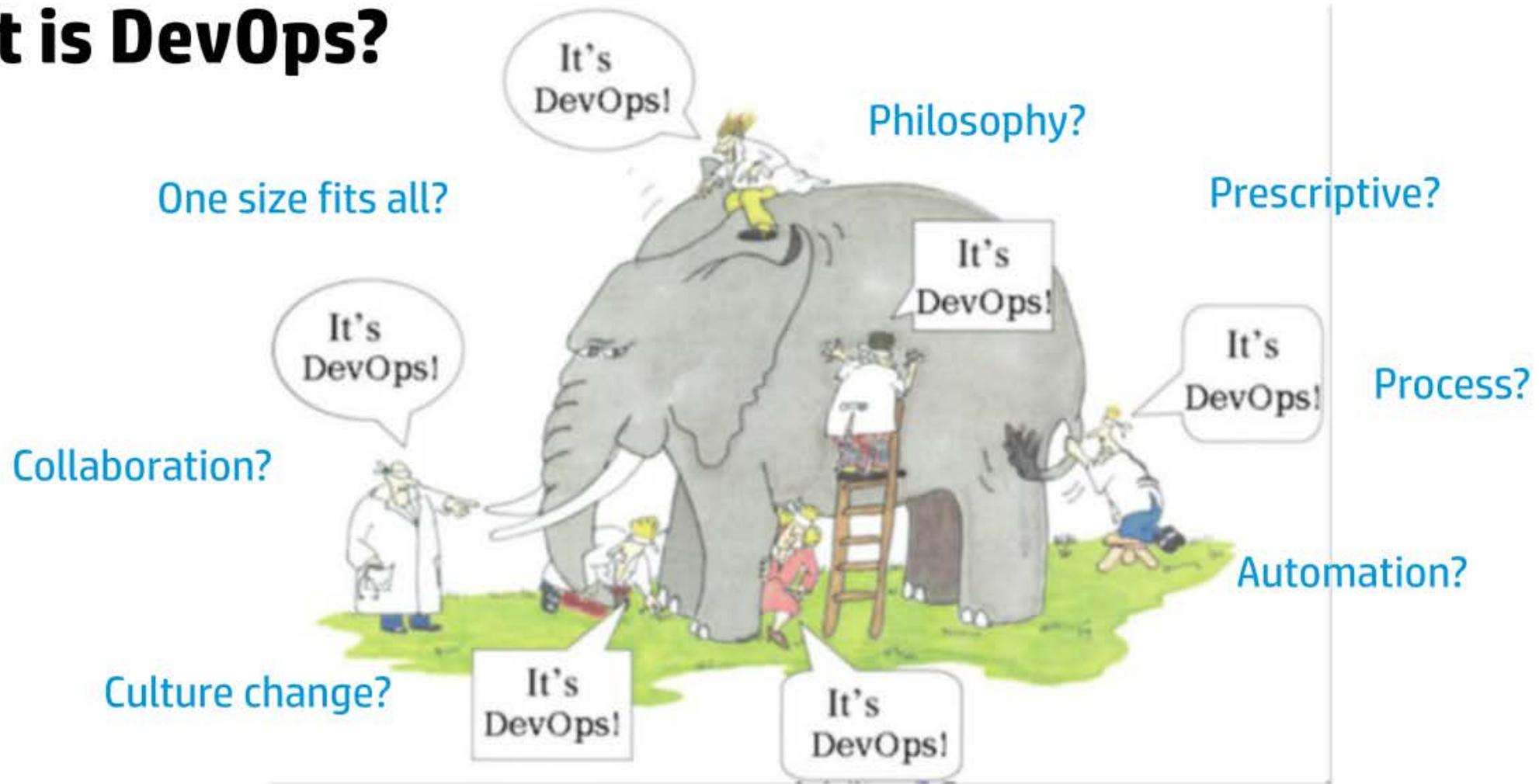
"Build to run"

"Regular releases reduce risk"

"Gartner says by 2016, DevOps will evolve from a niche to a mainstream strategy employed by 25 percent of global 2000 organizations" Enterprise Services Market/Watch

What is DevOps?

Philosophy, Culture Shift and set of principles and methods (based on Agile & Lean) for better Dev & Ops collaboration to build software that meets business needs faster, cheaper & more reliably

Shift in priorities is demanding DevOps

Waterfall

Dev → **Test** → **Ops**

Dev → QA → Staging & Production

Agile

Dev +Test

Development
Quality Assurance

0 1 2 3 4 Iterations

Ops

Staging & Production

DevOps

Dev + Test + Ops

Gartner's Pace-Layer Strategy

System of Innovation
System of Differentiation
System of Record
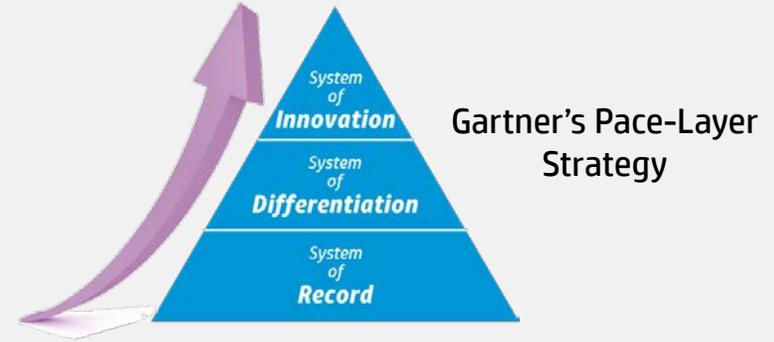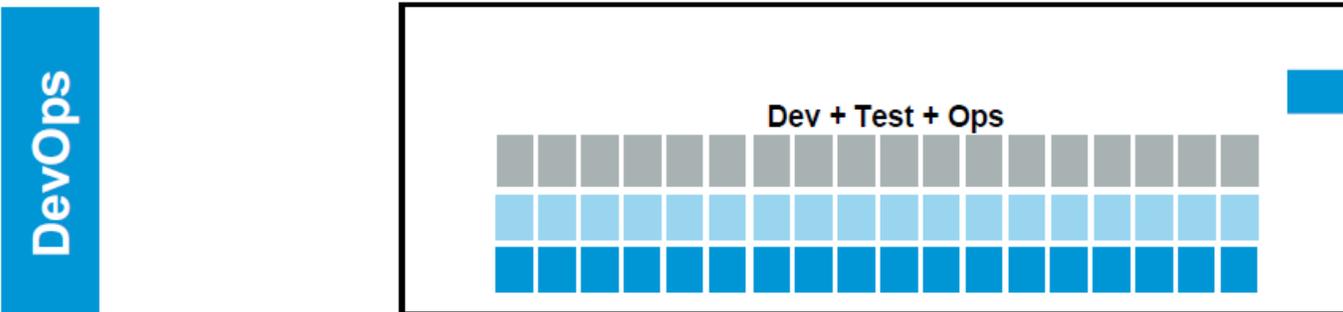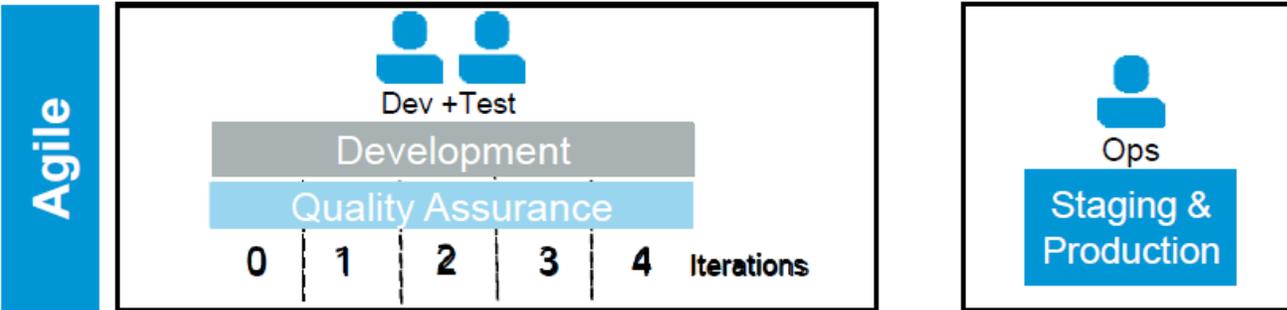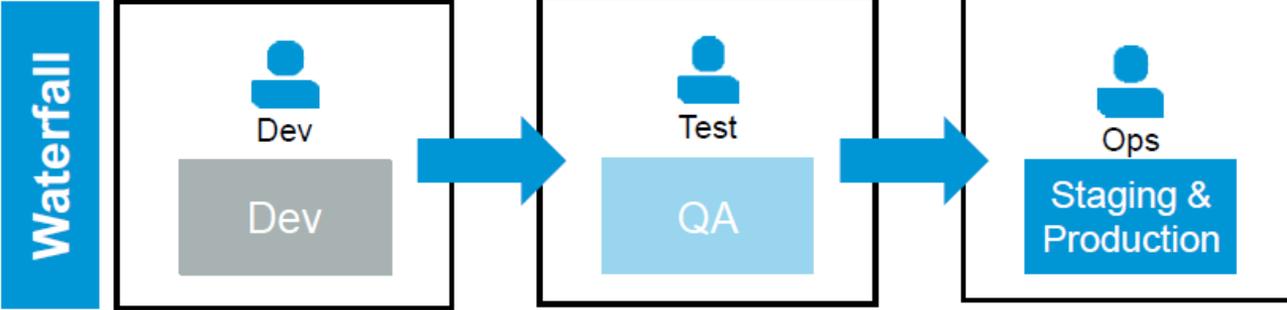
Enable «System of Innovation»
- «new ideas» rapidly made available
- Pace of Change: **very frequent**
⇒ Frontends; Product Catalog and Order Capture

Make «Differentiation» available
- Functions that provide competitive differentiation
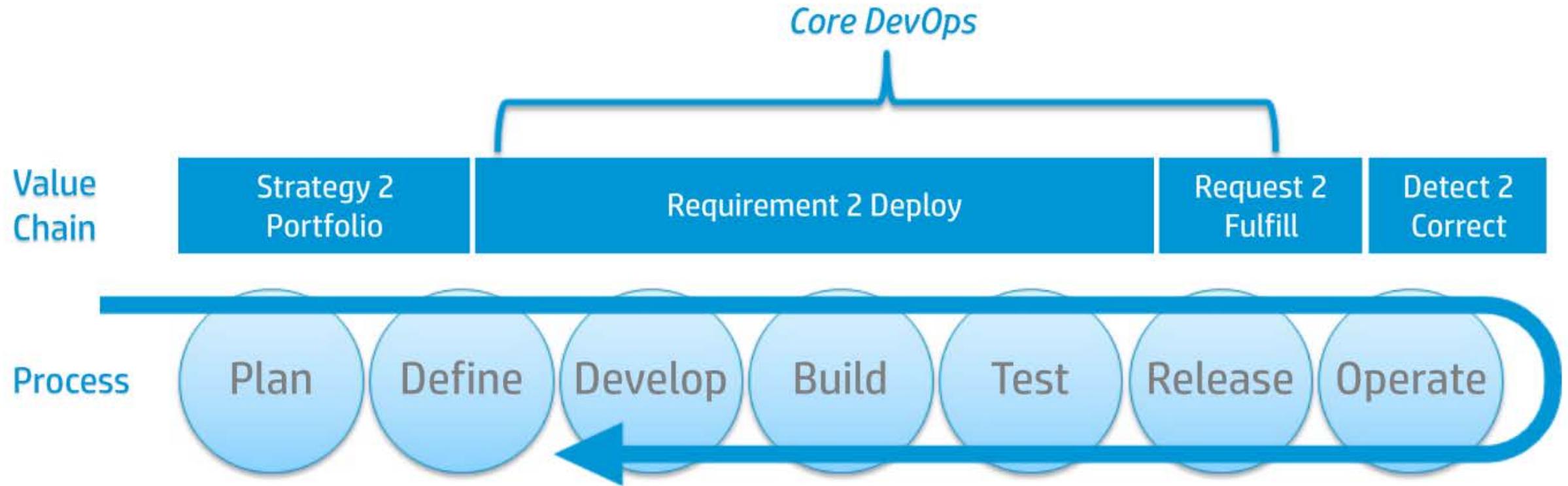- Pace of Change: **frequent, must be configurable**
⇒ CRM and Fulfilment

Improve execution of «System of Record»
- Bring back-end to the front-end
- Pace of Change: **incremental**
⇒ Charging, Billing, Invoice/AR

One product team !
- **Shared customer-oriented goals**
- **Shared objectives**
- **Shared responsibility**

# DevOps Mapped to IT Value Streams

Core DevOps

Value Chain	Strategy 2 Portfolio	Requirement 2 Deploy	Request 2 Fulfill	Detect 2 Correct

Process

Plan — Define — Develop — Build — Test — Release — Operate
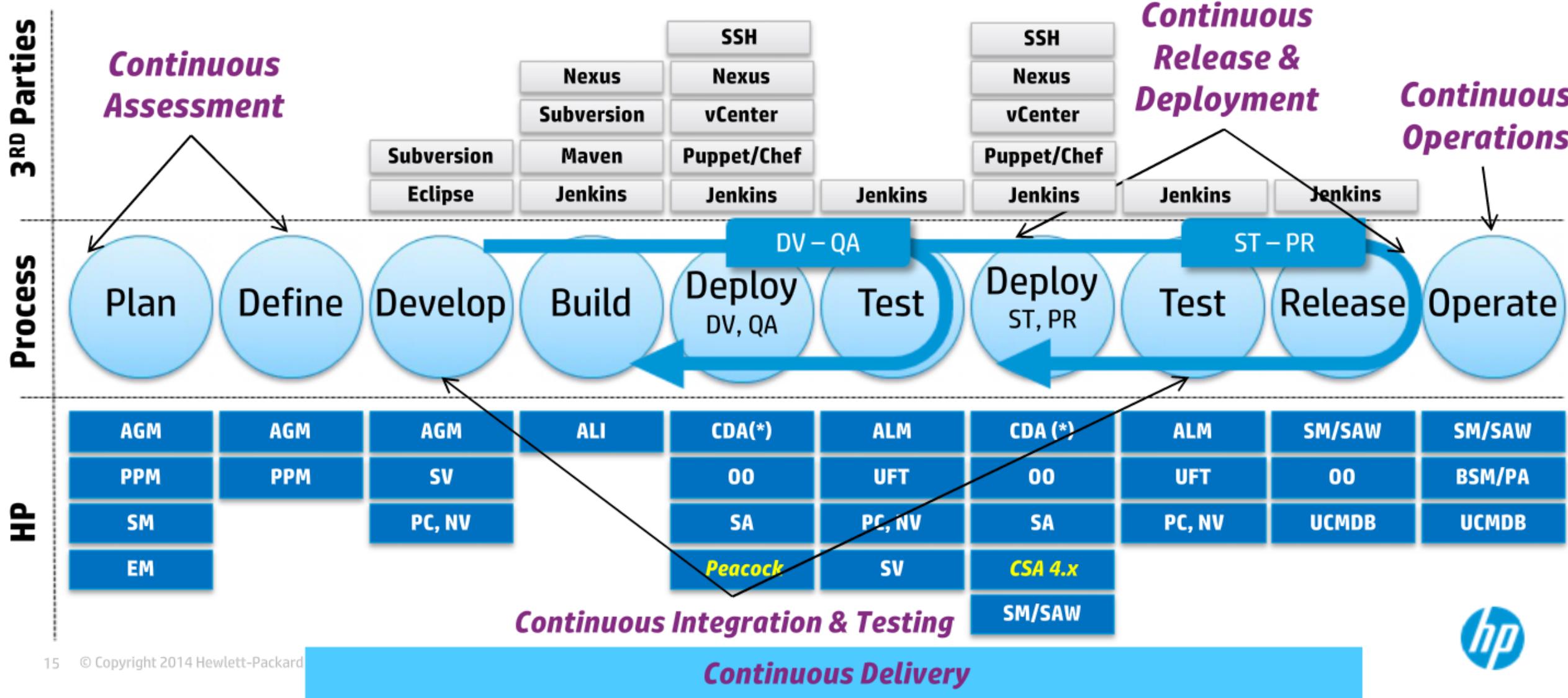
Portability across lifecycle environments

With Portability:

- Build apps with prod in mind

- Model all environments the same way

- Functionally equivalent, different in scale

- Automatically provision infrastructure as needed

- Deploy in an automated error-proof manner

- Automate change/config management

- Automate hand-offs

- Seamless movement of app from one environment to next
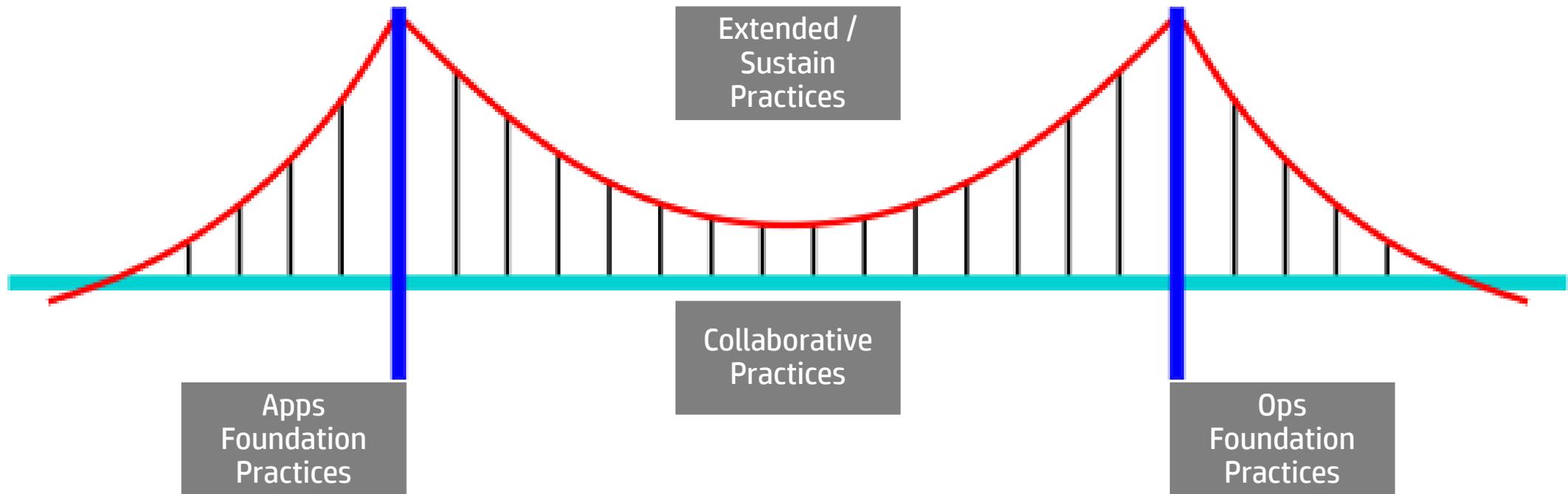
- On-premise, across cloud vendors, or a hybrid

App portability

Dev

Test

Prod

Stage
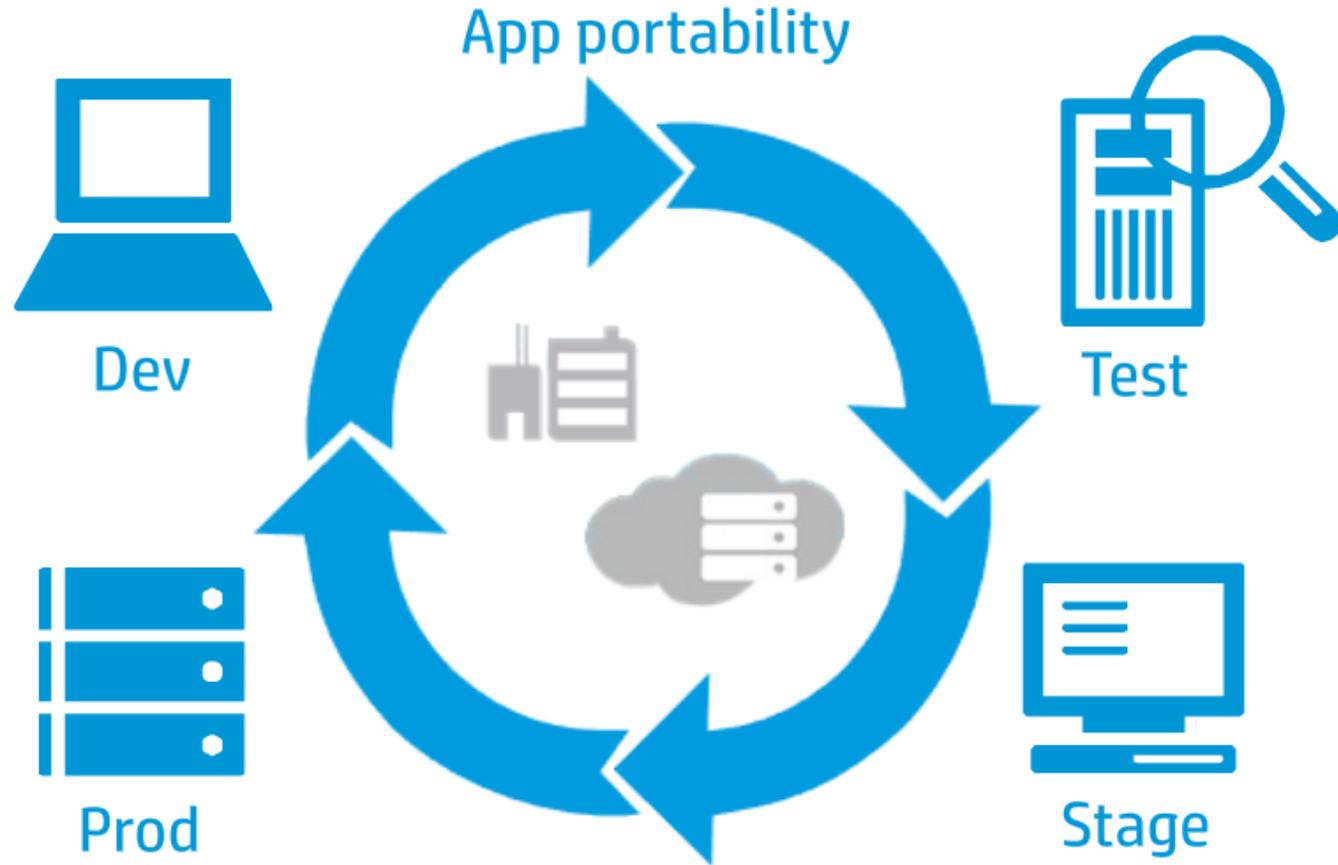
HP DevOps solution: Continuous Everything

HP's Implementation Blueprint

Bridge analogy to DevOps solutions

Extended / Sustain Practices

Collaborative Practices

Apps Foundation Practices

Ops Foundation Practices

Q & A