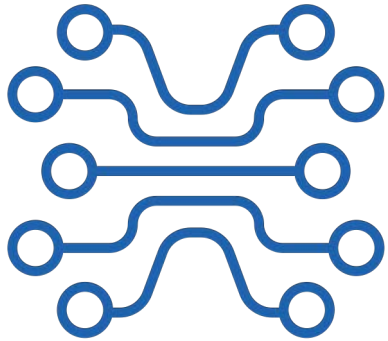




Speed is the new currency

Jori Ramakers, Digital Transformation Strategist

# The World Has Changed



Assault of technologies

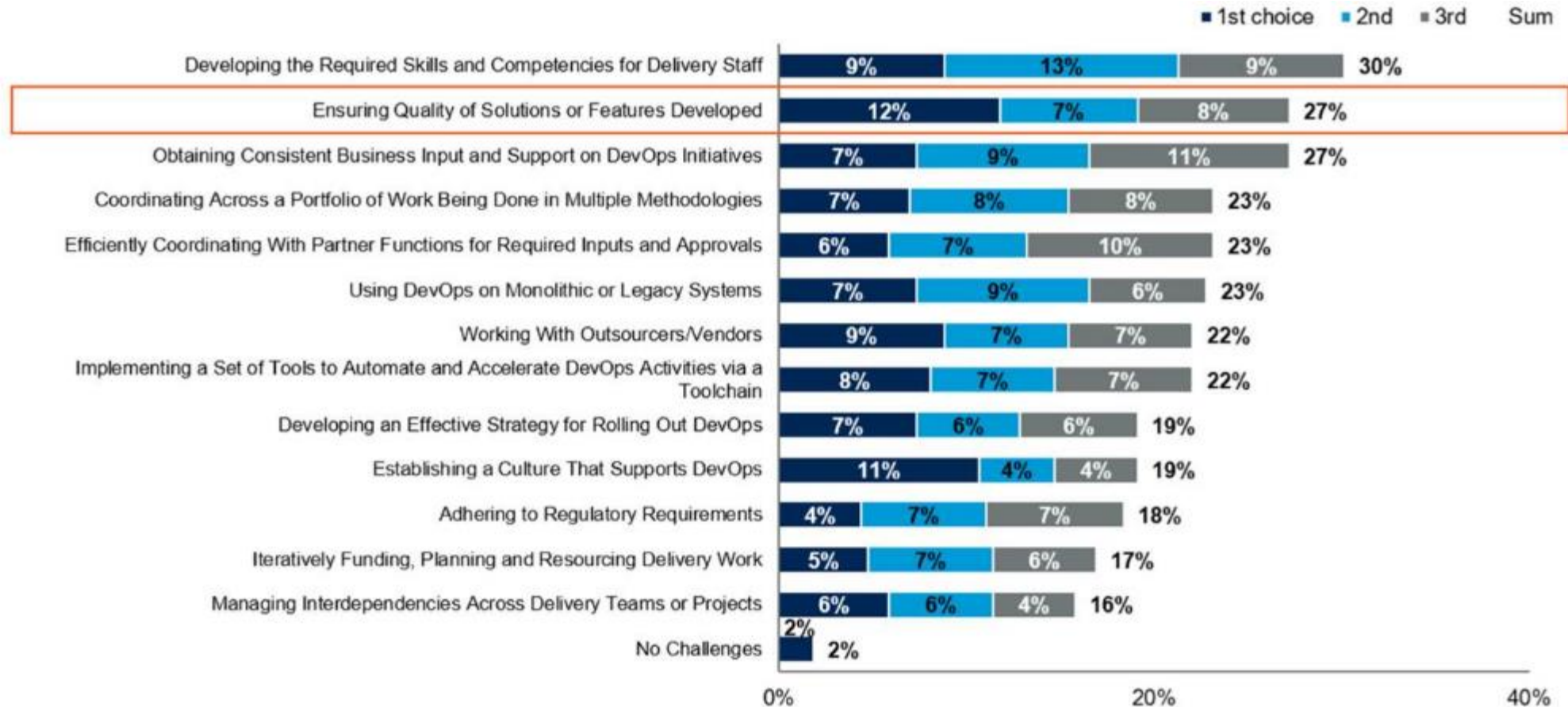


Globalization



Empowered customers

# Top DevOps Adoption Challenges



Base: All respondents, Excluding Unsure; n = 272

Source: Gartner (December 2018)

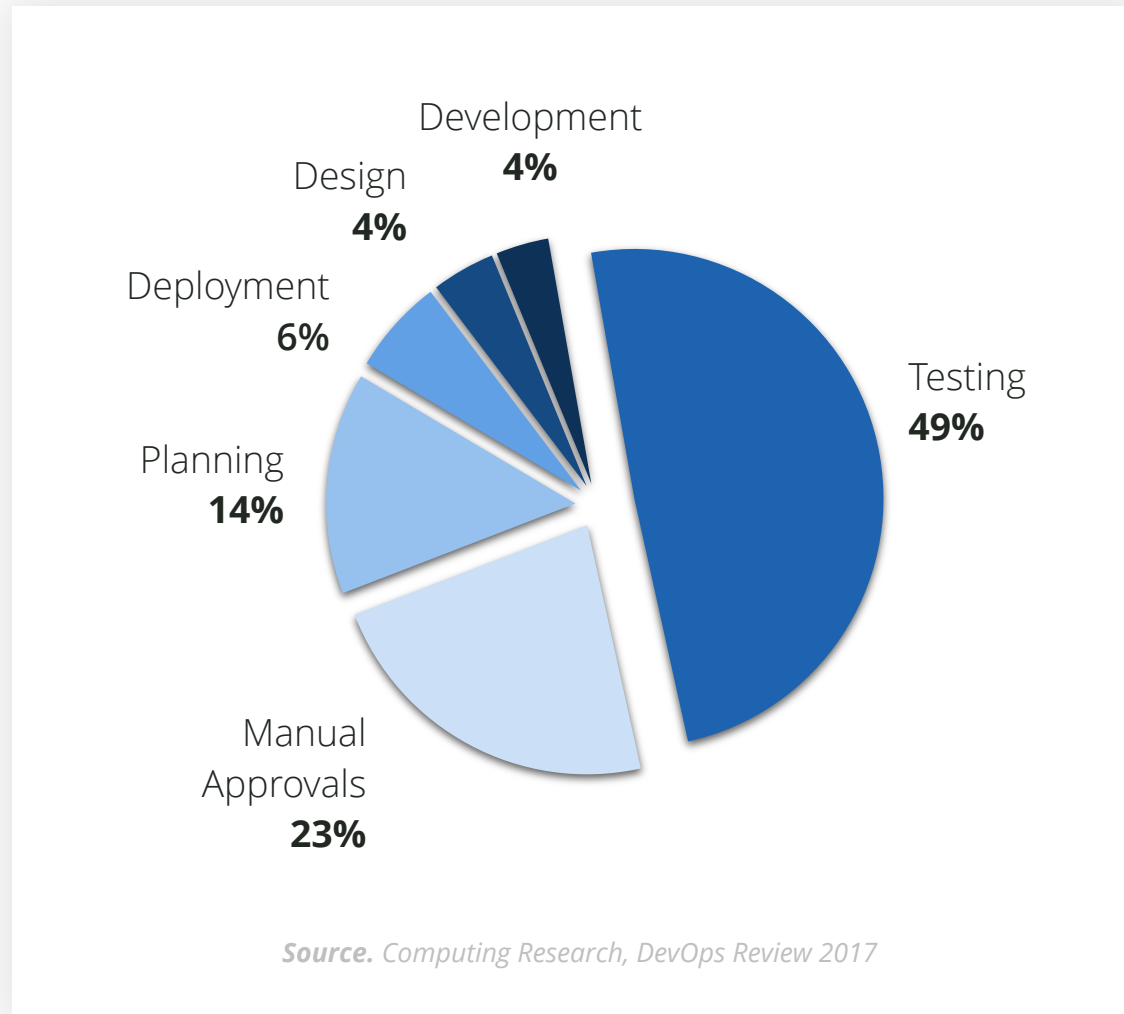
Q: What are the top challenges your organization encountered during adoption of DevOps? Summary of Top3 Ranks (1-3)

ID: 383495

How many of you think that Testing and QA is among the top 3 impediments for DevOps adoption?

---

# What Impedes the Delivery of Innovative Software?



What percentage of the overall IT budget is allocated to QA and testing?

---

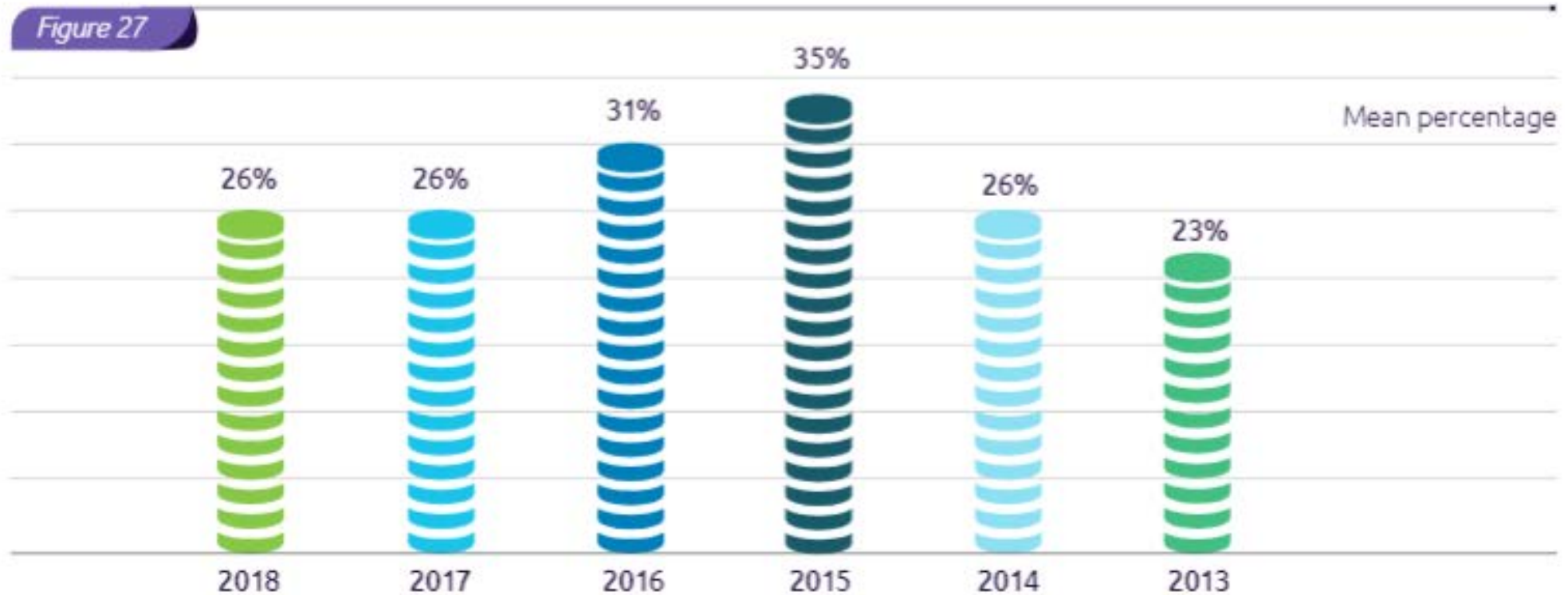
A) Up to 30%

B) 30-40%

C) More than 40%

# Total Budget Allocated to QA

Proportion of total IT budget allocated to QA and testing (including testing processes, tools, and resource costs)



Source: World Quality Report 2019

Yet...

*“QA still lives in the Stone Age of Software Development”*

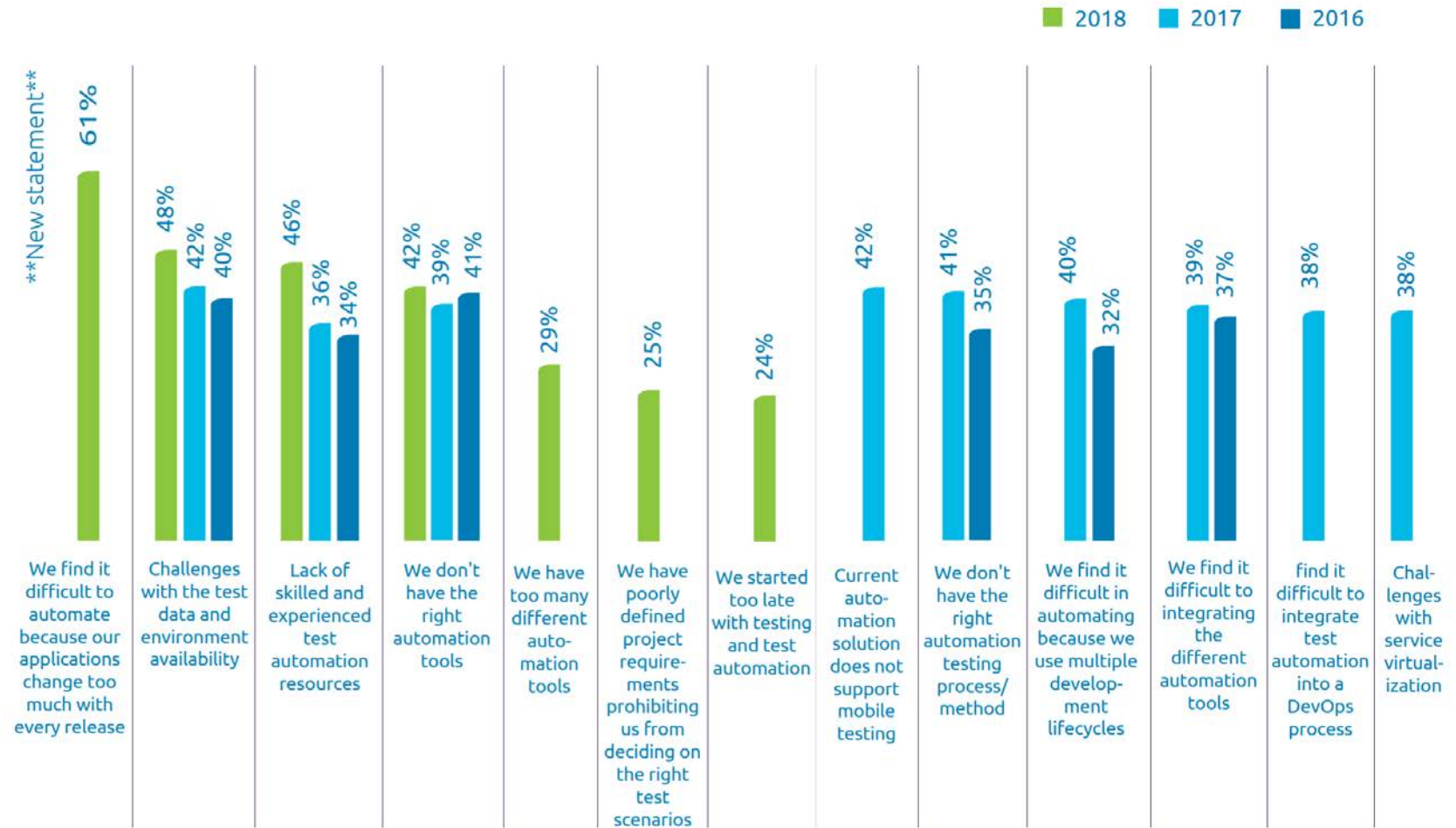
\*Jori Ramakers, Passionate Neanderthal

Most activities today are still highly manual



# Top Challenges for Testing

“We find it difficult to automate because our applications change too much with every release”



# Speed Is the New Currency

Business agility requires **Speed**

But Speed cannot come at the cost of **Quality**

Therefore, to increase Business Agility, **we NEED Continuous Quality**

**Continuous Quality can only be achieved through  
Continuous Testing**

# TRICENTIS

The continuous testing market leader with agile test management and advanced test automation optimized to support over **150+ technologies**



## RESULTS



**>90%**  
Test Automation



**5X**  
Test Speed Increase



**>80%**  
Risk Coverage

## PARTNERS

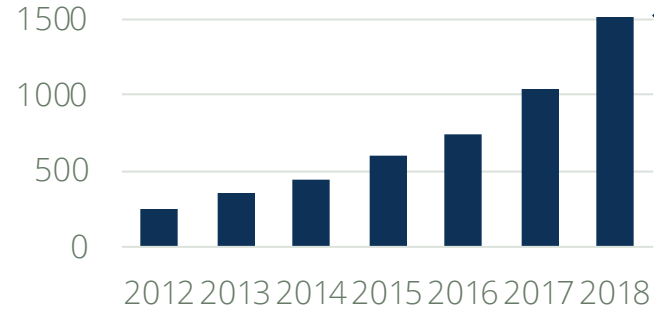


## TECH ALLIANCES



- 2018** - **QASymphony Merger**  
*Test Management*
- 2017** - **Q-up Acquisition**  
*Test Data*
- 2017** - **Flood Acquisition**  
*Load Testing*
- 2016** - **Insight Venture Partners Investment**
- 2007** - **Founded**

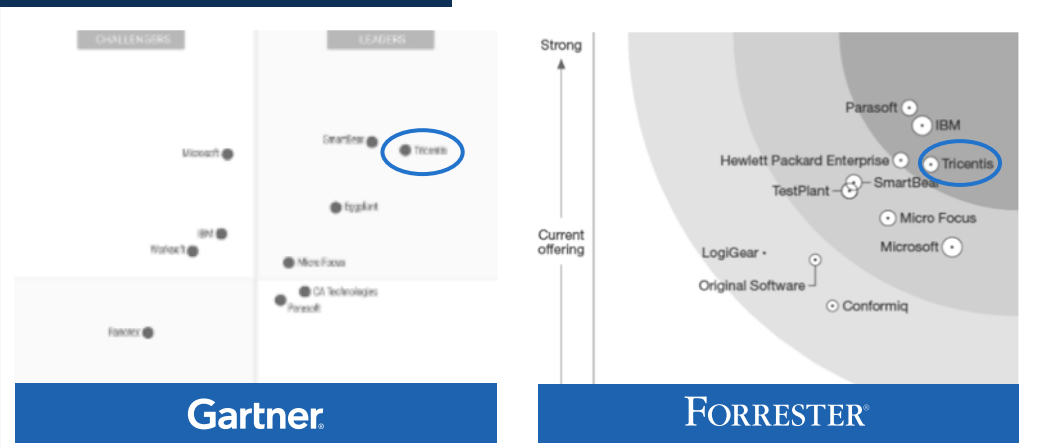
## CUSTOMERS



Greater than  
**1,500**  
Customers  
World Wide

- 7 of the top 10** Global Banks
- 6 of the top 10** Financial Services
- 4 of the top 10** Energy/Utilities
- 8 of the top 10** Insurance Companies
- 7 of the top 10** Telcos
- 7 of the top 10** Global Services

## ANALYST RECOGNITION



# Customer Experience Departments

## Transformation Strategy



- Business Value Roadmap
- Transformation Workshops
- Business Case Calculations
- CX End-to-End Customer Lifecycle experience

## Consulting Services



- Installation Guidance
- Resource Enablement
- Classroom Trainings
- Integration
- Migration
- Customization
- Best Practices
- Strategy Consulting

## Academy & Education



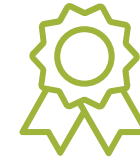
- Online Trainings & Certifications
- Massive Open Online Courses (MOOCs)
- YouTube Content with Tips & Tricks
- Definition of Career Paths

## Partner Enablement



- Guide Partners Through Education Offerings
- Provide Advanced Content & Best Practices
- Support with Resource Planning & Project Readiness
- Closing the Gap Between Product Education & Project Experience

## Customer Success Management



- Single Point of Contact
- Onboarding
- Success Workshops
- Connection with Other Customers
- Roadmap & Product Feedback Sessions
- Maturity Assessments

## Support Services



- Main Contact for Product-related Issues
- Incident & License Management
- Troubleshooting, Diagnosis & Resolution
- Enhancement Requests
- Upgrades & Updates



# Continuous Testing Framework

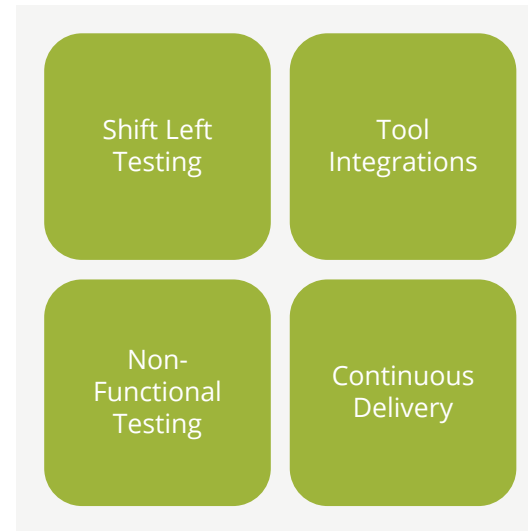
Capability Model – Process Model – Implementation Pattern

# Continuous Testing Capability Model

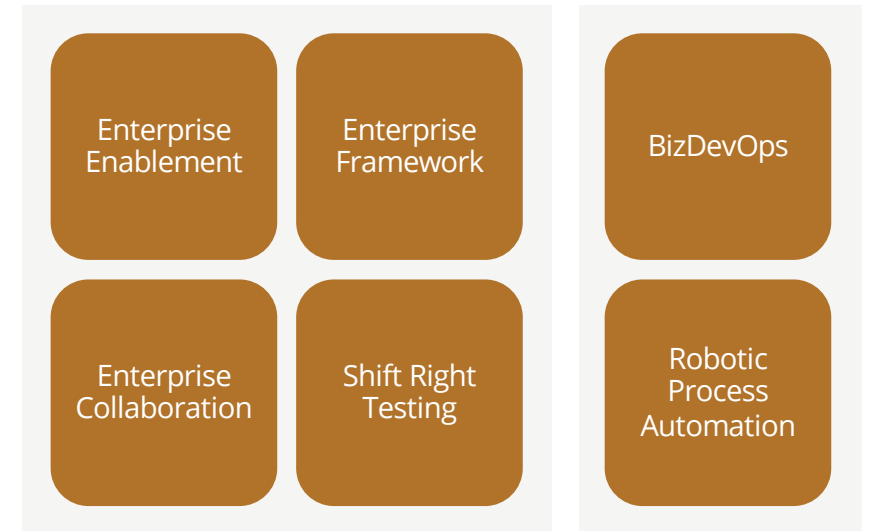
## Team Level



## Program Level



## Enterprise Level



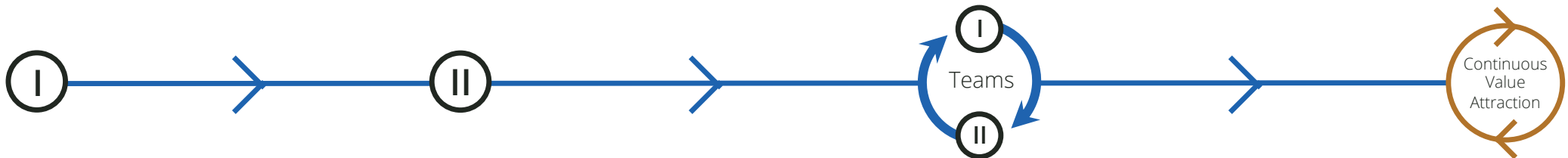
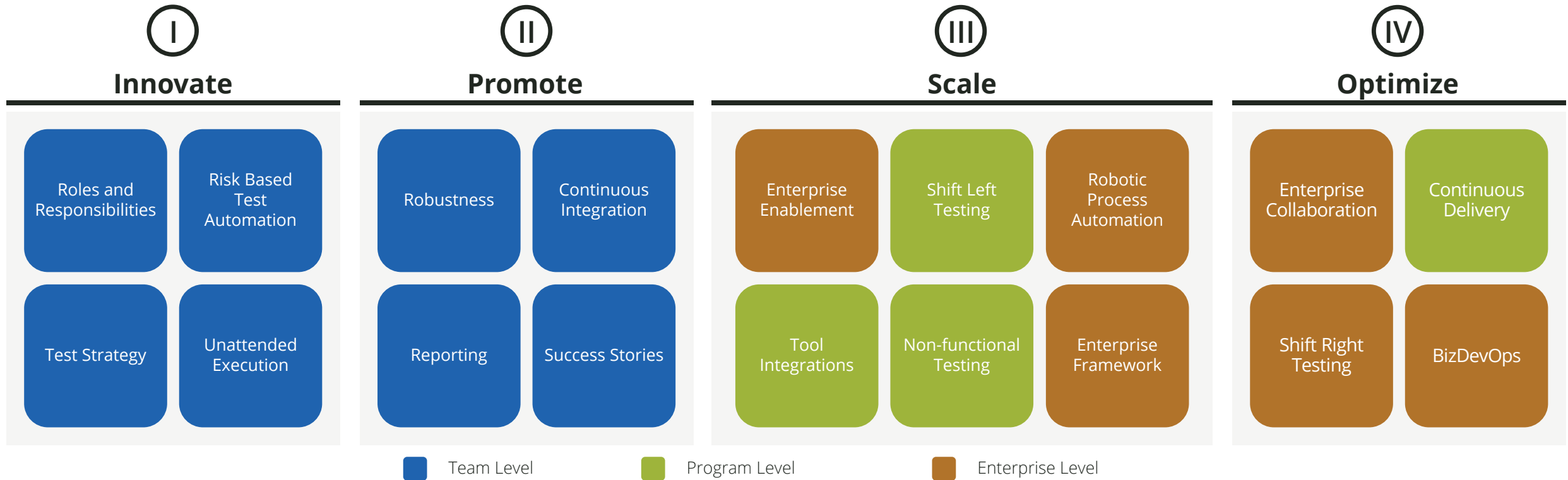
■ Team Level

■ Program Level

■ Enterprise Level

These capabilities are the **ingredients** to a successful Continuous Testing Transformation

# Continuous Testing Process Model



# Four levers...

Levers



Risk  
Coverage



Automation  
Degree



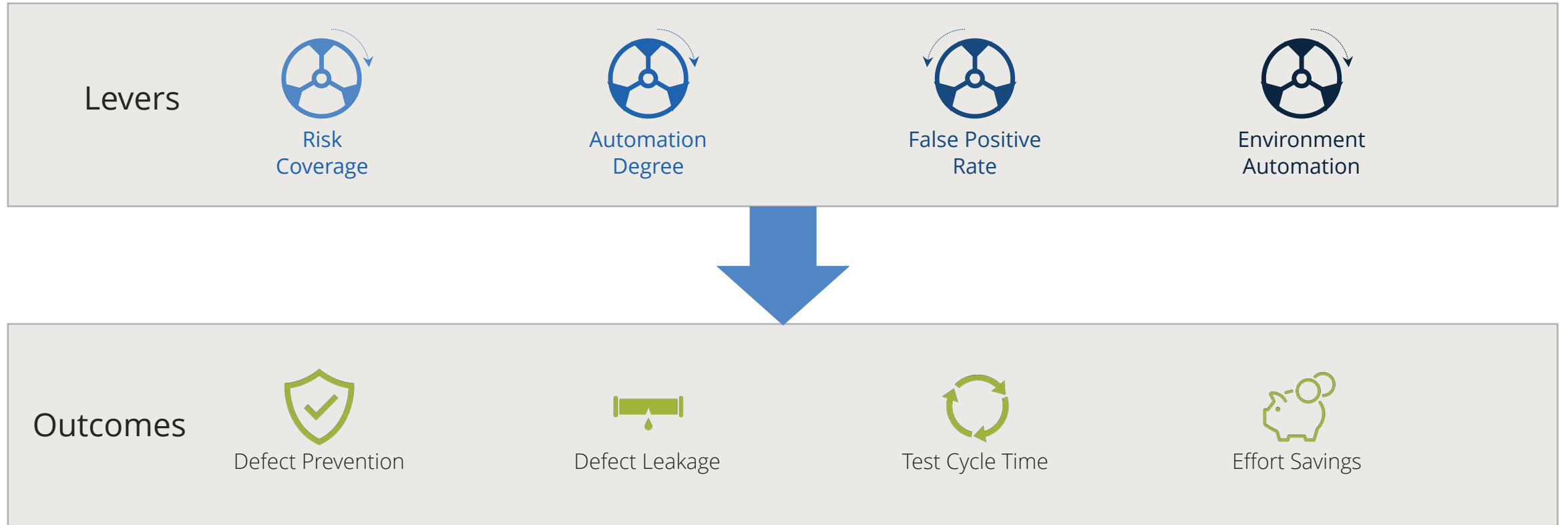
False Positive  
Rate



Environment  
Automation

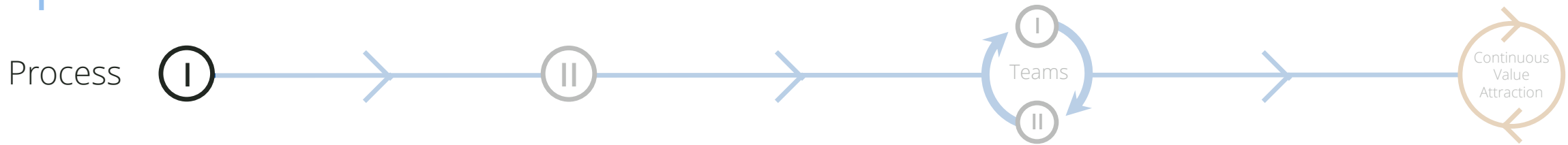


# ...influence four key outcomes



These levers and outcomes are influenced in a four phased lean Testing Transformation

# Phase I - Innovate



### Objectives

- Establish operating model
- Identify best practices
- Drive initial outcomes

### Activities

- Enablement & guidance\*
- Test strategy & design
- Automation & execution


### Levers


- Risk Coverage
- Automation Degree

### Capabilities

- Roles and Responsibilities
- Test Strategy
- Risk Based Test Automation
- Unattended Execution

Create a framework for transformation.

 Selected early adopters

 Teams with a big pain

# Outcomes

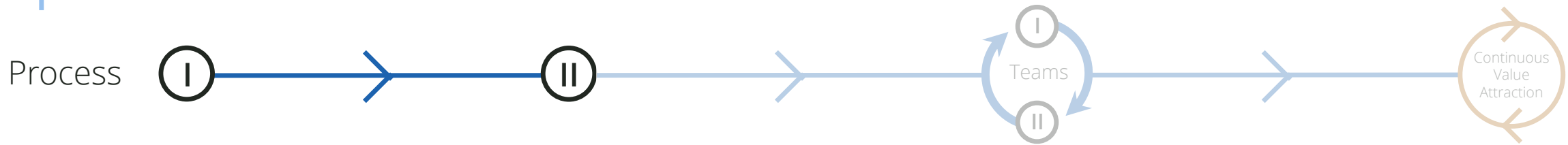
Established Operating Model  
Increased Defect Prevention &  
Reduced Defect Leakage  
Decreased Test Cycle Time



Increased Test Design effort  
Increased Test Maintenance effort  
Increased Test Analysis effort



# Phase II - Promote



## Objectives

- Resilient automation
- Create champions
- Show real outcomes

## Activities

- Root cause analysis\*
- Environment automation
- Continuous integration

## Levers



False Positive Rate



Environment Automation

## Capabilities

Robustness

Continuous Integration

Reporting

Success Stories

Promote your successes.



Selected early adopters



Teams with a big pain

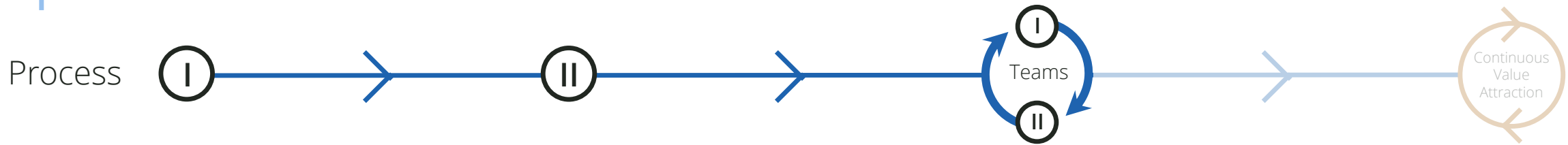
# Outcomes

Continuous Testing at team level  
Created first success stories  
Greater buy-in from leadership



Only tactical benefits realized  
Overall Testing effectiveness and  
efficiency not optimized

# Phase III - Scale



## Objectives

- Enterprise enablement
- Foster collaboration
- Achieve business value

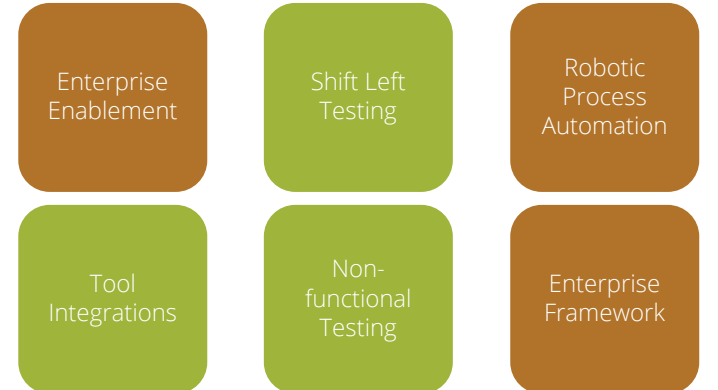
## Activities

- Shift left testing
- Enable new teams
- Build a community

## Levers



## Capabilities



Scale Continuous Testing throughout the Software Delivery Lifecycle.



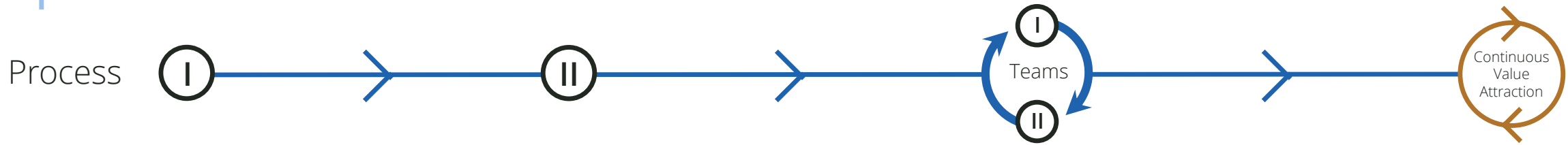
# Outcomes

E2E visibility in SDLC  
Real business impact starts to show  
Greater business agility



Not the full enterprise is optimized

# Phase IV - Optimize



### Objectives

- Continuous improvement
- Enterprise collaboration
- Increase business agility

### Activities

- Continuous Delivery
- BizDevOps
- Build – Measure - Learn

### Focus

The diagram shows 'Business Agility' (represented by a circular icon with three dots) on the left, followed by a right-pointing arrow, and 'Business Opportunity Gain' (represented by an icon with three arrows pointing outwards) on the right.

### Capabilities

- Enterprise Collaboration
- Continuous Delivery
- Shift Right Testing
- BizDevOps

Create a collaborative problem-solving mindset across the enterprise.





# Outcomes



Holistic uplift of business outcomes through accelerated innovation and business agility

Serious gains in employee experience

# Continuous Testing Implementation Pattern

Business Outcomes

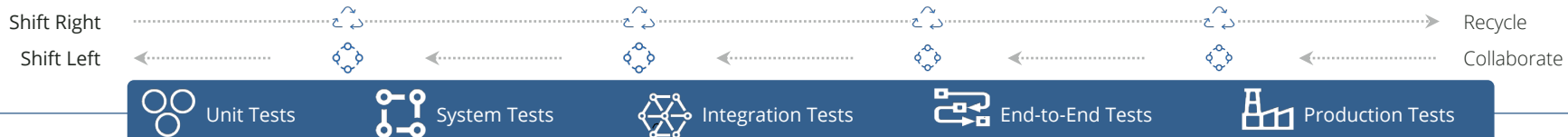


Community

Enterprise Enablement

Enterprise Strategy Team

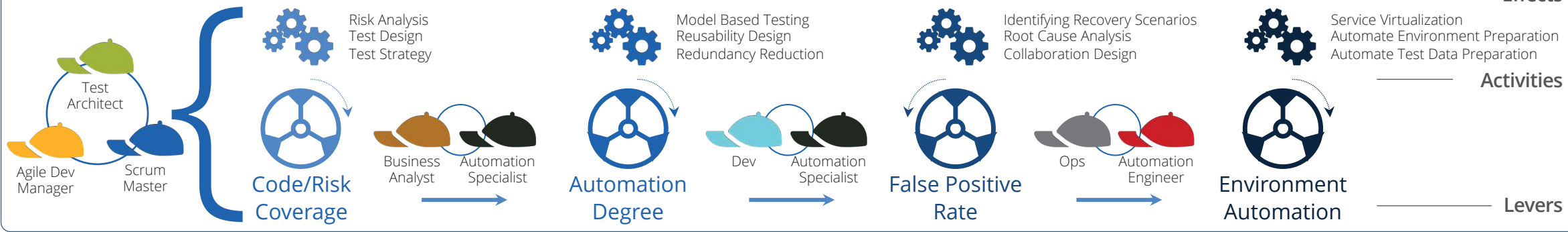
Software Delivery Lifecycle



Testing Stage

	Defect Prevention	Defect Leakage	Test Cycle Time	Effort Savings	Outcomes
Long term	↓ Defect Leakage	↑ Effort Savings	↑ Maintenance Effort	↑ Effort Savings	↑ Effort Savings
Short term	↑ Defect Prevention	↑ Design effort	↓ Test Cycle Time	↑ Design Effort	↓ Test Cycle Time
			↑ Analysis Effort	↓ Test Cycle Time	↑ Preparation Effort

Effects



Activities

Levers

# Continuous Testing Implementation Pattern

Business Outcomes

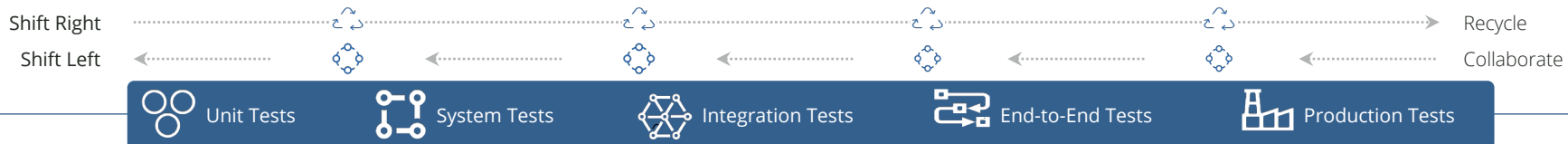


Community

Enterprise Enablement

Enterprise Strategy Team

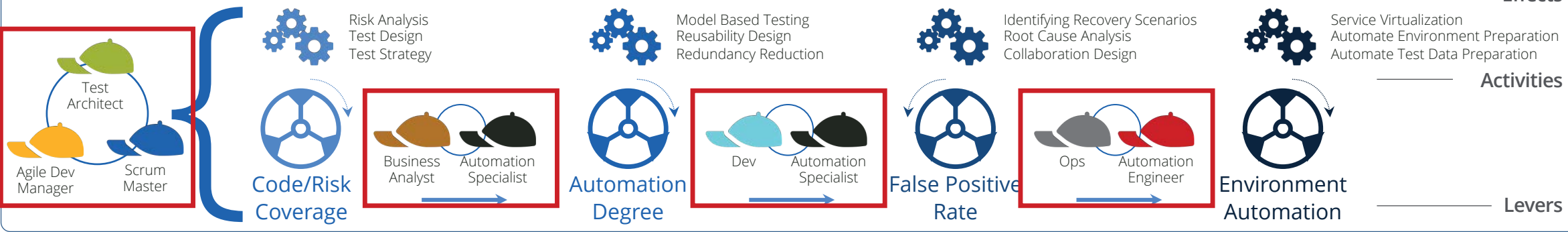
Software Delivery Lifecycle



Testing Stage

	Defect Prevention	Defect Leakage	Test Cycle Time	Effort Savings	Outcomes
Long term	↓ Defect Leakage	↑ Effort Savings	↑ Maintenance Effort	↑ Effort Savings	↑ Effort Savings
Short term	↑ Defect Prevention	↑ Design effort	↓ Test Cycle Time	↑ Design Effort	↓ Test Cycle Time
			↑ Analysis Effort	↓ Test Cycle Time	↑ Preparation Effort

Effects



# Continuous Testing Hats



## Agile Dev Manager

**Responsibilities:** Team enabler – removes roadblocks so the team can excel – also fosters collaboration  
**Competencies:** Familiar with Continuous Testing practices



## Scrum Master

**Responsibilities:** Lead respective teams, overseeing delivery & Test Strategy within teams  
**Competencies:** Familiar with Continuous Testing practices



## Automation Specialist

**Responsibilities:** Design, Automation, Execution and Analysis of Tests  
**Competencies:** System/Process SME, Strong QA background



## Automation Engineer

**Responsibilities:** Overcomes technical automation challenges  
**Competencies:** Technical background, coding knowledge, problem solver



## Test Architect

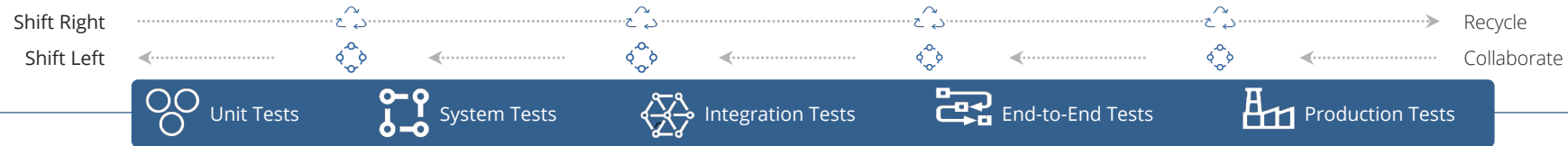
**Responsibilities:** Oversees implementation, provides coaching and guidance, achievement of objectives  
**Competencies:** Enabler and coach, broad Continuous Testing experience, Technical Background pre

# Continuous Testing Implementation Pattern

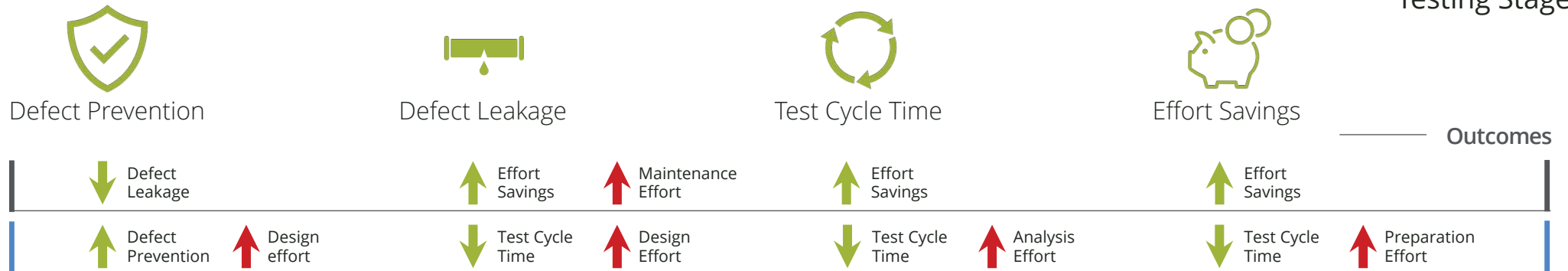
Business Outcomes



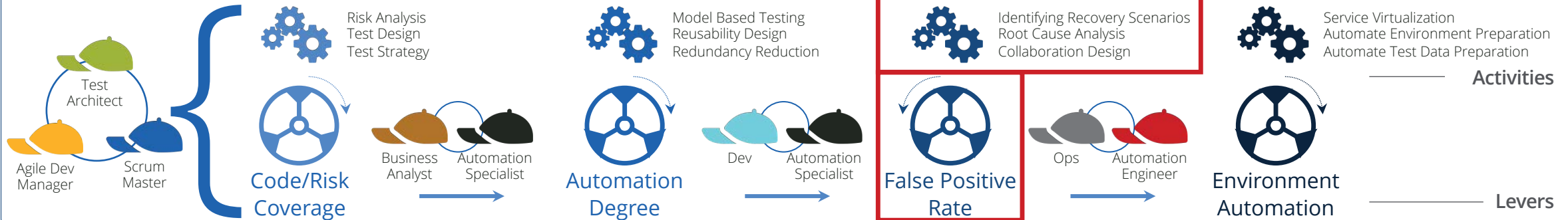
Software Delivery Lifecycle



Testing Stage



Long term  
Short term



# ASSESS Your False Positives



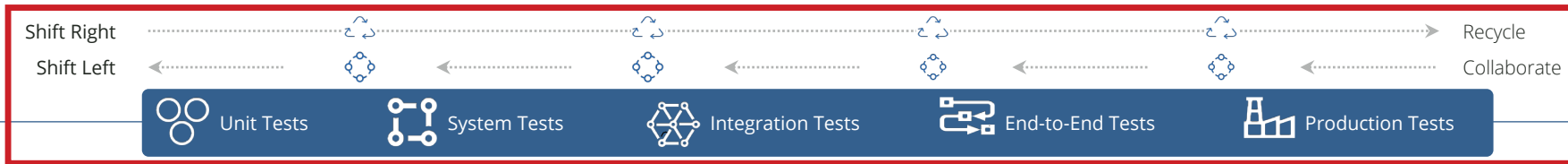
# Continuous Testing Implementation Pattern

Business Outcomes



- Community
- Enterprise Enablement
- Enterprise Strategy Team

Software Delivery Lifecycle

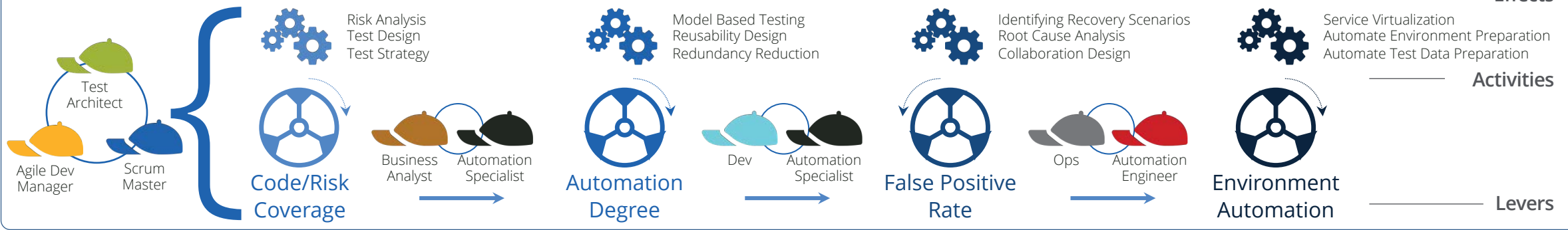


Testing Stage



	Defect Leakage	Effort Savings	Maintenance Effort	Effort Savings	Effort Savings
Long term	↓	↑	↑	↑	↑
Short term	↑	↓	↑	↓	↓

Outcomes

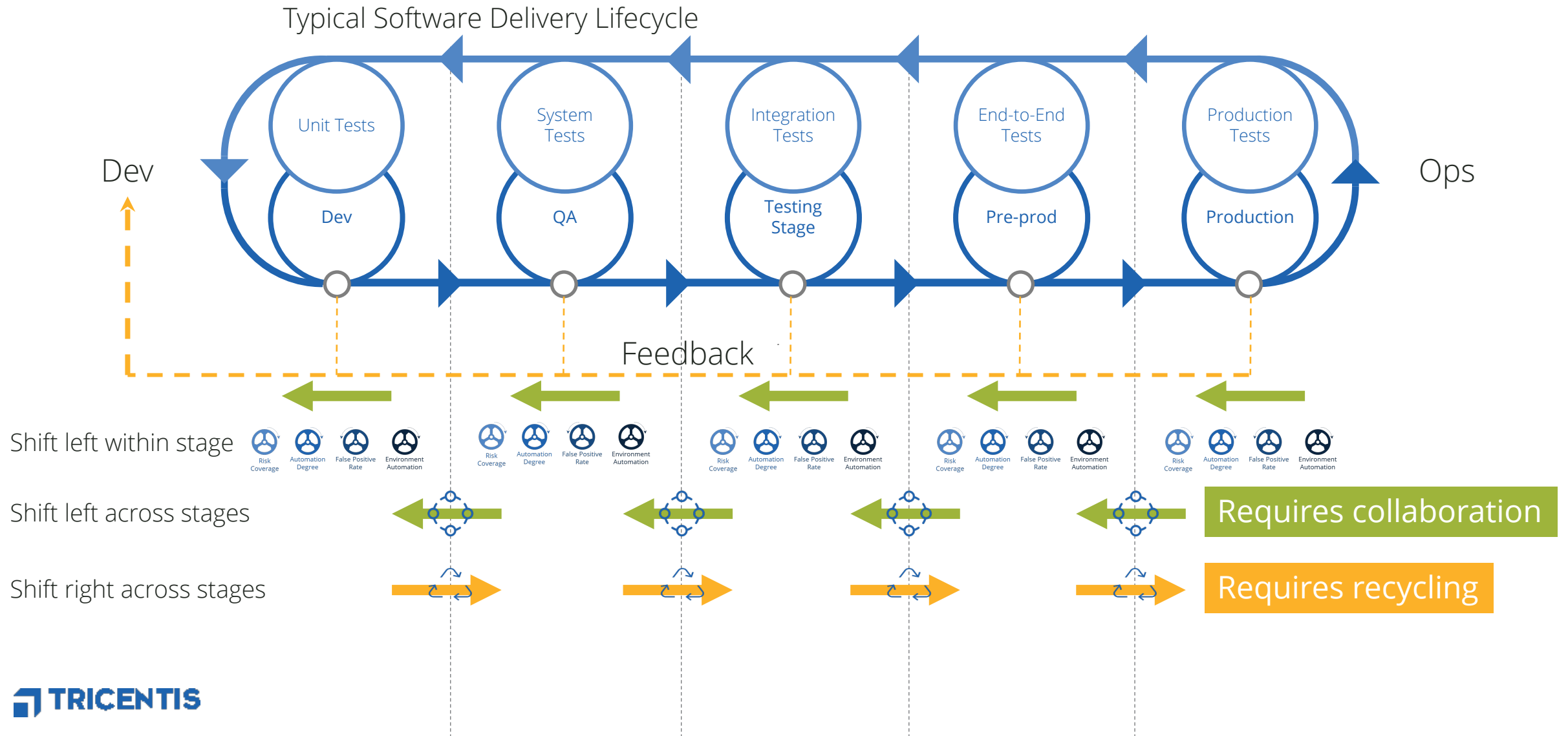


Effects

Activities

Levers

# Shorten the Feedback Loop





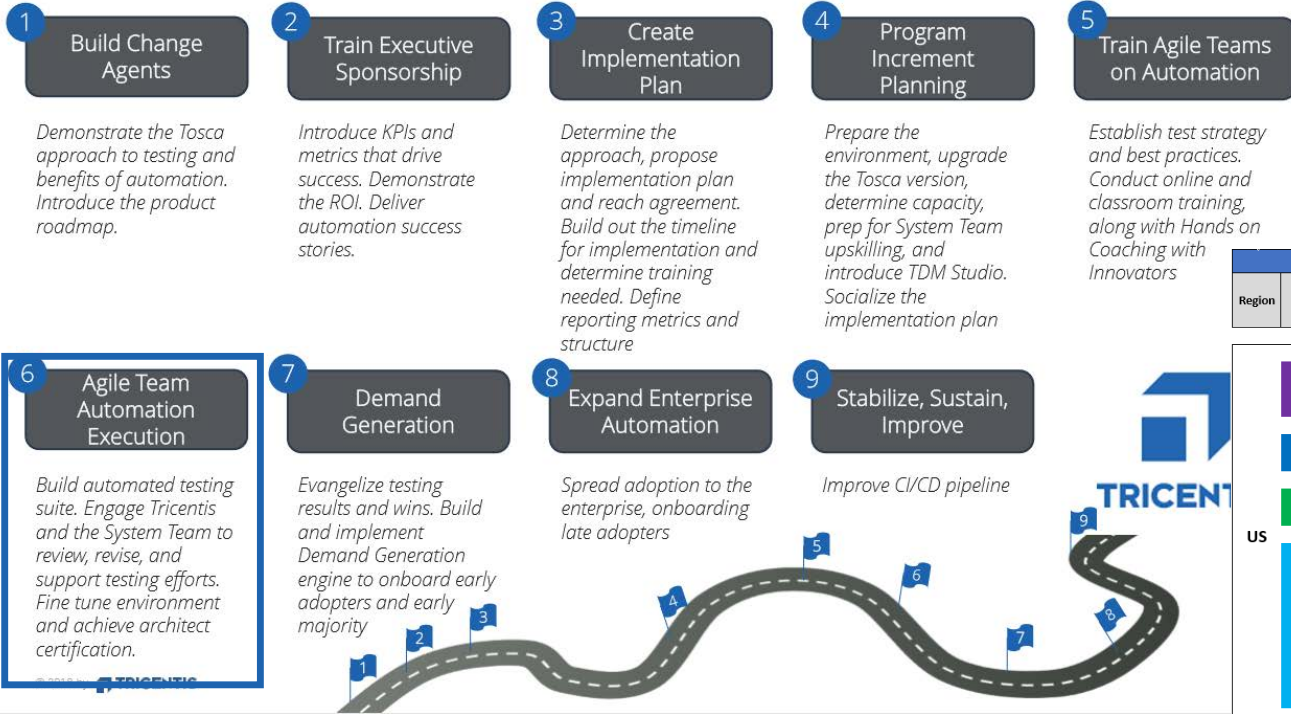
# Customer Example: Aegon



Start date: February 2019

Transformation Phase: I - Innovate

Key drivers: Quality key for transformation, "Make testing everyone's responsibility"



← Testing Transformation roadmap

↓ Testing Maturity Model

Focus Area			Setup		Traceability	Manual	Automate	Optimize		Integration
Region	Team	Supported Applications	Tosca Installed	Connected to Central Repo	Jira Story link to Tosca Req/Testcase	Centrally Stored Manual test cases	Centrally Stored Auto test cases	Risk Based Prioritization	Tosca Test Case Design	(CI, CD)
US	IDW Team	IMDW - EIDW IMDW - NIDW Informatica								
	Markit EDM Team	Markit EDM US Markit EDM Global	█	█		█	█		█	
	TA Team	IMR LUP								
	SAA 1 Team	ALPS FAF Knowledge Lake								
	SAA 2 Team	PH for Securities (PAM) Precision LM Yardi Voyager Eagle Pace								

👤👤👤 Early adopters: US-based teams



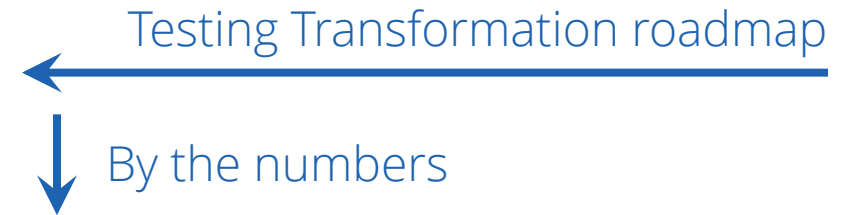
# Customer Example: ExxonMobil



Start date: November 2015

Transformation Phase: III - Scale

Key drivers: Quality owned by Application owners, Cultural shift and mindset



### ExxonMobil - Adoption Approach

The deployment approach at ExxonMobil focused on alignment with adoption curve stakeholder groups - Tricentis would support ExxonMobil until the program sustained a critical application mass.

Phase 0 Pilots	Phase 1 Initial Operating	Phase 2 Deployment	Phase 3 Transfer & Operate
3 major pilot programs with embedded teams supporting client's regional support programs	Structured, program-leveraging developed content, project backlog, current resource team	Perform product upgrade migration, stabilize demand management & resource model	Transition to client managed automated tests

**150+** Over 150 lunch and learns, application focused risk workshops and Tosca training sessions delivered globally.

Resources based in Houston, Curitiba, Bangkok & Budapest, as well as support provided in India & Australia

**Test Automation**

Before **11%** After **83%**

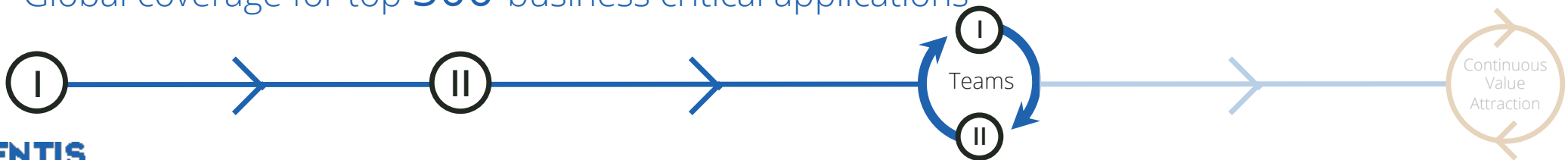
**Business Risk Coverage**

Before **30%** After **87%**

**E2E Execution**

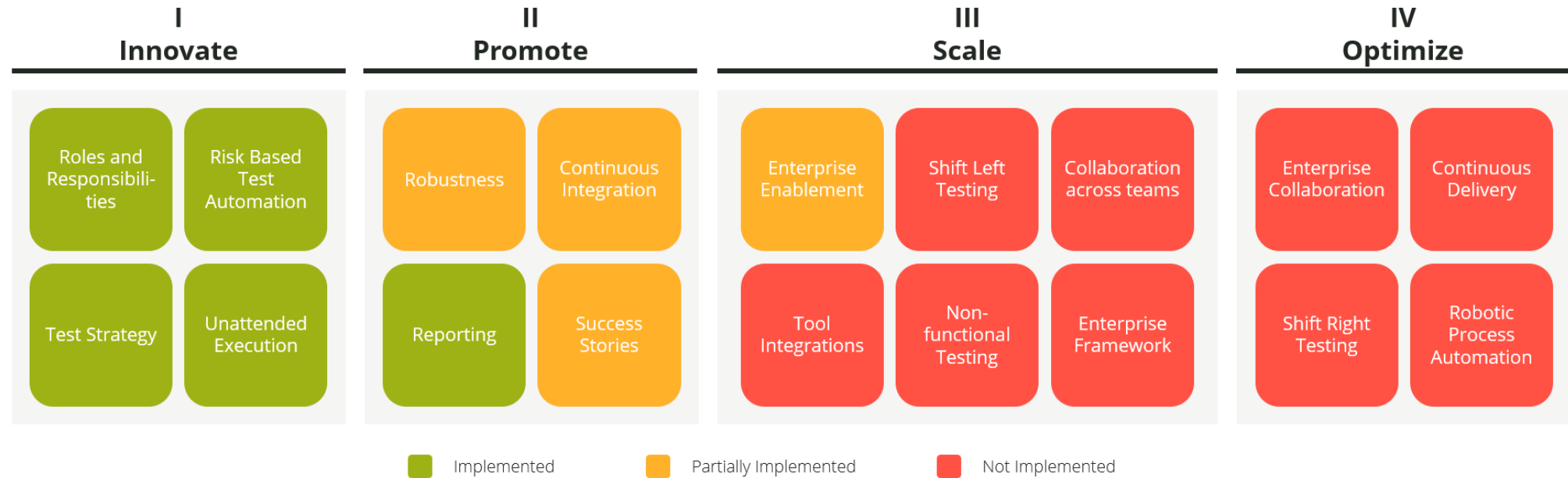
Before **7 weeks** After **4 days**

Global coverage for top **500** business critical applications



# Continuous Testing Maturity Assessment

## Elements of Continuous Testing



Assess your organization now through our online assessment!

# CONTINUOUS TESTING PLAYBOOK



Exclusive release for Agile Australia 2019



## Continuous Testing Playbook



[https://ctma.tricentis.com/resources/  
continuous-testing-playbook/](https://ctma.tricentis.com/resources/continuous-testing-playbook/)

## Continuous Testing Maturity Assessment



<https://ctma.tricentis.com/assess>  
Conference code: AA2019